

39th Annual Report  
OF THE  
Board of Education

City of Newark, N. J.

—  
1895











THIRTY-NINTH ANNUAL REPORT  
OF THE  
BOARD OF EDUCATION,  
OF THE CITY OF NEWARK.

FOR THE  
YEAR 1895,

COMPRISING  
THE REPORT OF THE BOARD OF EDUCATION; THE REPORT  
OF THE CITY SUPERINTENDENT; REFERENCE AND  
STATISTICAL TABLES; THE RULES OF THE  
BOARD, AND REGULATIONS FOR  
THE SCHOOLS.

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NEWARK, N. J.:  
L. J. HARDHAM, Printer and Binder, 243 & 245 Market Street.  
1896.

April 30th, 1896.



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PART I.

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REPORT OF THE BOARD OF EDUCATION.

# BOARD OF EDUCATION.

1895.

HENRY J. ANDERSON, *President.*

R. D. ARGUE, *Secretary,*  
11 Clark street.

SAMUEL GAISER, *Ass't Secretary,*  
112 Clifton avenue.

WILLIAM N. BARRINGER, *City Superintendent,*  
1142A Broad street.

GEORGE W. REEVE, *Superintendent of Erection and Repairs,*  
12 Elizabeth avenue.

## MEMBERS.

<i>Ward.</i>	<i>Name.</i>	<i>Place of Business.</i>	<i>Place of Residence.</i>
1st	HENRY J. ANDERSON,	15 Central avenue,	15 Central avenue.
	J. A. BACKUS,	5 Jacob street, N. Y.	291 Broad street.
2d	H. P. RODEN,	333 Washington st.,	333 Washington st.
3d	GEORGE SAUPE,	255 Prince street,	255 Prince street.
	CHARLES L. ILL,	132 Springfield ave.,	132 Springfield ave.
4th	MILES F. QUINN,	16 Mulberry street,	16 Mulberry street.
	J. W. READ,	82 Park place,	82 Park place.
5th	M. B. PUDER,	89 Jefferson street,	89 Jefferson street.
6th	M. H. THORNTON,	23 Bruce street,	23 Bruce street.
	R. W. BROWN,	206 Market street,	67 Newton street.
7th	C. W. H. SILLCOCKS,	421 Broadway, N. Y.,	49 Nelson place.
	H. M. WOOLMAN,	75 Thirteenth ave.,	75 Thirteenth ave.
8th	JOHN K. GORE,	Prudential Ins. Co.,	310 Summer avenue.
9th	JAMES L. HAYS,	749 Broad street,	104 Clinton avenue.
	A. N. LEWIS,	174 Pennsylvania ave.,	268 Clinton avenue.
10th	F. L. MEYER,	108 Elm street,	108 Elm street.
	DAVID B. NATHAN.	Chas. Cooper & Co.,	47 Napoleon street.
11th	EDWARD H. HAMILL,	Prudential Ins. Co.,	230 Roseville avenue.
	WILLIAM A. GAY,	22 Clinton street,	297 New street.
12th	J. J. KRONENBERGER,	34 Bremen street,	34 Bremen street.
13th	HENRY OST,	471 Springfield ave.,	471 Springfield ave.
14th	*FRANK L. BEDELL,	Prudential Ins. Co.,	3 Hillside avenue.
15th	WALTER H. CLARK,	284 Washington st.,	261 Eighth avenue.

\*Died August 28, 1895.

George T. Geiser, 504 Clinton ave., appointed by the Mayor, Dec. 5, 1895, to fill vacancy caused by the death of Frank L. Bedell.



## STANDING COMMITTEES.

1895.

FINANCE—Roden, Ill, Bedell, Thornton, Gore, Meyer, Quinn.

SCHOOL HOUSES—Gay, Lewis, Backus, Quinn, Saupe, Sillcocks, Kronenberger.

REPAIRS—Nathan, Clark, Bedell, Ost, Thornton, Saupe, Puder.

HEATING AND VENTILATING—Saupe, Brown, Clark, Quinn, Woolman, Nathan, Puder.

TEACHERS—Hays, Gore, Read, Backus, Thornton, Gay, Puder.

NORMAL AND TRAINING AND HIGH SCHOOLS—Backus, Hays, Brown, Lewis, Puder, Hamill, Kronenberger.

EVENING SCHOOLS—Sillcocks, Ill, Ost, Nathan, Quinn.

TEXT BOOKS, COURSE OF STUDY AND EXAMINATIONS—Read, Hays, Roden, Quinn, Gay, Gore, Kronenberger.

FURNITURE AND SUPPLIES—Meyer, Sillcocks, Ost, Thornton, Brown, Lewis, Kronenberger.

SANITARY REGULATIONS—Woolman, Ill, Roden, Meyer, Puder.

November 29, 1895, Commissioner Brown was assigned to Committee on Finance and Commissioner Woolman to Committee on Repairs in place of Commissioner Bedell, deceased.

January 31, 1896, Commissioners Clark and Geiser were added to Committee on Evening Schools, and Commissioners Ost and Geiser to Committee on Sanitary Regulations.

# STATISTICAL RECORD

OF THE

## Board of Education of the City of Newark

FOR THE YEARS 1894 AND 1895.

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NAMES OF MEMBERS, WITH THE YEARS IN WHICH THEY HAVE  
SERVED, RESPECTIVELY.

JAMES L. HAYS...	1876-7-8-9-80-1-2-3-4-5-6-7-8-9-90-1-2-3-4-5
HENRY C. KLEMM. 1884 (2 $\frac{3}{4}$ mos.)	-5-6-7-8-9-90-1-2-3-4 (9 mos.)
MATTHEW H. THORNTON.....	1888-9-90-1-2-3-4-5
JOHN B. OELKERS.....	1889-90-1-2-3-4
HENRY J. ANDERSON.....	1890-1-2-3-4-5
CHARLES HOOD.....	1891-2-3-4
JAMES MULLIN.....	1891-2-3-4
MILES F. QUINN.....	1892-3-4-5
EDWARD H. HAMILL.....	1892-3-4-5
GEORGE SAUPE.....	1892-3-4-5
JOHN VAN DOREN, JR.....	1893-4
ADAM J. BERG.....	1893-4
MOSES J. DEWITT.....	1893-4
JAMES J. LEONARD.....	1893-4
GEORGE GRIMME.....	1893-4
HUGH P. RODEN.....	1893-4-5
EDWARD F. HAGEMANN.....	1894 (3 mos.)
FRANKLIN L. MEYER.....	1894-5
CHARLES W. H. SILLCOCKS.....	1894-5
JAMES A. BACKUS.....	1895



CHARLES L. ILL.....	1895
JOSHUA W. READ.....	1895
MATHIS B. PUDER.....	1895
ROBERT W. BROWN.....	1895
HENRY M. WOOLMAN.....	1895
JOHN K. GORE.....	1895
ALFRED N. LEWIS.....	1895
DAVID B. NATHAN.....	1895
WILLIAM A. GAY.....	1895
JOHN J. KRONENBERGER.....	1895
HENRY OST.....	1895
FRANK L. BEDELL.....	1895 (4 mos.)
WALTER H. CLARK.....	1895
GEORGE T. GEISER.....	1895 (4 mos.)

## PRESIDENTS OF THE BOARD.

*STEPHEN CONGAR.....	1851-2-3-4
SAMUEL H. PENNINGTON.....	1855-6-7-8-9-60-1-2
*THOMAS W. DAWSON.....	1863-4-5
WILLIAM K. McDONALD.....	1866
FREDERICK W. RICORD.....	1867-8-9
EDWIN H. DAWSON.....	1870
*WILLIAM A. WHITEHEAD.....	1871
L. SPENCER GOBLE.....	1872-3
SAMUEL A. FARRAND.....	1874
ARAM G. SAYRE.....	1875
EDWARD L. DOBBINS....	1876-7-8-9-80 (9 mos.)
GEORGE B. SWAIN.....	1880 (3 mos.)-1-2-3
*EDWARD GOELLER.....	1884-1889-90-1
*EDMUND L. JOY.....	1885-6-7
JAMES L. HAYS.....	1888-1892
HENRY C. KLEMM.....	1893-4 (9 mos.)
JOHN VAN DOREN, JR.....	1894 (3 mos.)
HENRY J. ANDERSON.....	1895

## SECRETARIES OF THE BOARD.

JOHN WHITEHEAD.....	1851-2-3
FREDERICK W. RICORD.....	1854-5-6-7-8-9-60
GEO. B. SEARS. 1860-1-2-3-4-5-6-7-8-9-70-1-2-3-4-5-6-7 (8 mos.)	
C. ALBERT STONELAKE..	1877 (4 mos.)-8-9-80-1-2 3 (8½ mos.)
GEORGE W. CASE.....	1883 (3½ mos.)-4-5-6-7-8-9
P. L. BRYCE.....	1890-1-2-3-4
R. D. ARGUE.....	1895

## CITY SUPERINTENDENTS OF THE PUBLIC SCHOOLS.

STEPHEN CONGAR.....	1853-4-5-6-7-8-9
G. B. SEARS. 1859-60-1-2-3-4-5-6-7-8-9-70-1-2-3-4-5 6-7 (8 mos.)	
W. N. BARRINGER.....	1877 (4 mos.)-8-9-80-1-2-3-4-5-6-7-8-9-90-1 2-3-4-5

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\*Deceased.

# REPORT

OF THE

## BOARD OF EDUCATION,

TO THE COMMON COUNCIL.

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NEWARK, N. J., Feb. 28, 1896.

*To the Honorable the Common Council of the City of Newark :*

GENTLEMEN—In accordance with the requirements of the City Charter and its supplements, the Board of Education respectfully presents the following report for the year 1895 :

### CURRENT EXPENSES.

#### RECEIPTS.

##### STATE.

State Appropriation.....	\$26,455 63
State Tax.....	343,554 39
	<hr style="width: 50%; margin-left: 0;"/> \$370,010 02

##### MUNICIPAL.

Balance from 1894.....	\$10,638 19
Tax Ordinance.....	175,372 00
Contingent Fund .....	27,500 00
Cash Deposited with Comptroller...	526 23
Interest on Bequest.....	240 00
	<hr style="width: 50%; margin-left: 0;"/> \$214,276 42
	<hr style="width: 50%; margin-left: 0;"/>
	\$584,286 44



## EXPENDITURES.

## STATE.

Teachers' Salaries..... \$370,010 02

## MUNICIPAL.

Salaries, Text Books, Repairs, Furni-  
 ture, Heating, Fuel, &c..... \$207,177 36  
\$577,187 38  
 Balance..... \$7,099 06

## EXPENDITURES IN DETAIL.

## STATE.

	APPROPRIATIONS.	EXPENDITURES.
Teachers' Salaries—Day.....	\$360,798 79	\$360,798 79
Teachers' Salaries—Evening....	9,211 23	9,211 23
	<u>\$370,010 02</u>	<u>\$370,010 02</u>

## MUNICIPAL.

	APPROPRIATIONS.	EXPENDITURES.	BALANCE.
Teachers' Salaries—Day	\$49,133 70	\$46,417 32	\$2,716 38
Teachers' Salaries—Ev'g	14,288 77	13,181 99	1,106 78
Officers' Salaries.....	12,590 00	12,490 09	99 91
Janitors' Salaries.....	35,688 16	35,688 16	....
Incidentals.....	2,000 00	1,955 52	44 48
Repairs.....	19,745 94	19,745 94	.....
Text Books, Stationery, Printing, etc. ....	25,000 00	24,290 64	709 36
Furniture and Supplies.	10,322 67	10,322 67	.....
Heating Apparatus....	15,000 00	13,939 66	1,060 34
Fuel.....	14,000 00	13,818 70	181 30
School Census.....	3,047 38	2,731 70	315 68
Insurance.....	2,200 00	1,666 91	533 09
Rents.....	6,131 44	6,057 70	73 74
Gas.....	2,844 23	2,844 23	.....
Water.....	2,026 13	2,026 13	.....
Unappropriated.....	.....	.....	258 00
	<u>\$214,018 42</u>	<u>\$207,177 36</u>	<u>\$7,099 06</u>

## SCHOOL HOUSES AND SITES.

## RECEIPTS.

Balance from 1894.....	\$55,306 91
Public School Bonds.....	100,000 00
Contingent Fund.....	12,281 66
	<hr/> \$167,588 57

## APPROPRIATIONS.

Fifteenth Avenue School House....	\$14,811 80
Charlton Street School House.....	21,191 69
" Franklin " School House, (Ad- dition).....	20,872 06
Elizabeth Avenue School House (Ad- dition) .....	8,431 36
Elizabeth Avenue School House (Ad- ditional Ground).....	11,000 00
School Site and Building, Third Ward	36,337 66
South Tenth Street School House (Addition). .....	20,000 00
Monmouth Street School House (Ad- dition) .....	12,000 00
Elliot Street School House (Addition)	9,000 00
Ridge Street School House Property	8,744 00
Lock Street School House (Water Closet).....	1,200 00
Morton Street School House (Water Closet).....	1,000 00
Lafayette Street School House (Water Closet) .....	1,000 00
Burnet Street School House (Addi- tion).....	1,000 00
Hamburg Place School House (Annex)	1,000 00
	<hr/> \$167,588 57

## APPROPRIATIONS AND EXPENDITURES.

## FIFTEENTH AVENUE SCHOOL HOUSE.

Balance from 1894.....	\$11,711 80	
Appropriation, 1895.....	3,100 00	
	<hr/>	\$14,811 80
Expended for mason work.....	\$5,228 33	
carpenter work.....	3,562 33	
plumbing work.....	1,077 35	
painting work.....	706 00	
flagging.....	208 51	
architect's fee.....	355 89	
grading.....	195 00	
water.....	38 00	
sewer.....	235 00	
artificial stone work...	600 00	
fencing.....	589 54	
	<hr/>	\$12,795 95
Balance.....		\$2,015 85

## CHARLTON STREET SCHOOL HOUSE.

Balance from 1894.....	\$16,145 32	
Appropriation, 1895.....	5,046 37	
	<hr/>	\$21,191 69
Expended for mason work.....	5,512 60	
carpenter work.....	5,989 00	
plumbing work.....	2,830 00	
painting work.....	794 00	
blue stone and flagging	1,585 17	
iron work.....	711 00	
architect's fee.....	533 48	
grading.....	184 60	
whitewashing.....	30 00	
artificial stone work...	664 00	
fencing.....	585 59	
	<hr/>	\$19,419 44
Balance.....		\$1,772 25



## "FRANKLIN" SCHOOL HOUSE.

Balance from 1894. ....		\$20,872 06
Expended for mason work.....	\$7,802 00	
carpenter work .....	8,753 50	
plumbing work.....	325 00	
painting work .....	827 07	
iron work.....	843 00	
stone work.....	1,027 00	
flagging.....	715 97	
grading.....	15 00	
architect's fee.....	301 73	
fencing .....	13 50	
	<hr/>	\$20,623 77
Balance .....		\$248 29

## ELIZABETH AVENUE SCHOOL HOUSE (ADDITION).

Balance from 1894.....	\$5,931 36	
Appropriation, 1895.....	2,500 00	
	<hr/>	\$8,431 36
Expended for mason work.....	\$2,714 00	
carpenter work.....	2,087 26	
plumbing work.....	477 00	
painting work.....	395 00	
architect's fee.....	100 00	
grading.....	140 00	
artificial stone work...	133 00	
fencing... ..	33 93	
	<hr/>	\$6,080 19
Balance .....		\$2,351 17

## ELLIOT STREET SCHOOL HOUSE (ADDITION).

Appropriation, 1895.....		\$9,000 00
Expended for mason work.....	\$1,800 00	
carpenter work.....	815 25	
	<hr/>	\$2,615 25
Balance.....		\$6,384 75.

## SOUTH TENTH STREET SCHOOL HOUSE (ADDITION).

Appropriation, 1895.....		\$20,000 00
Expended for advertising.....	\$32 25	
	<hr/>	\$32 25
Balance.....		\$19,967 75.

## RIDGE STREET SCHOOL HOUSE.

Appropriation, 1895.....		\$8,744 00
Expended for site and building.....	\$8,733 75	
	<hr/>	\$8,733 75
Balance.....		\$10 25

## HAMBURG PLACE SCHOOL HOUSE (ANNEX).

Appropriation, 1895.....		\$1,000 00
Expended for carpenter work.....	\$672 05	
mason work. ....	75 00	
painting work.....	80 00	
roofing.....	38 64	
	<hr/>	\$865 69
Balance.....		\$134 31

## THIRD WARD SCHOOL SITE AND BUILDING.

Appropriation, 1895.....	\$36,337 66
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## MONMOUTH STREET SCHOOL HOUSE (ADDITION).

Appropriation, 1895....	\$12,000 00
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## ELIZABETH AVENUE SCHOOL HOUSE (ADDITIONAL GROUND).

Appropriation, 1895.....	\$11,000 00
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## LOCK STREET SCHOOL HOUSE (WATER CLOSET).

Appropriation, 1895.....	\$1,200 00
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## MORTON STREET SCHOOL HOUSE (WATER CLOSET).

Appropriation, 1895.....	\$1,000 00
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## LAFAYETTE STREET SCHOOL HOUSE (WATER CLOSET).

Appropriation, 1895.....	\$1,000 00
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## BURNET STREET SCHOOL HOUSE (ADDITION).

Appropriation, 1895.....	\$1,000 00
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## BALANCES TO 1896.

Fifteenth Avenue School House.....	\$2,015 85
Charlton Street School House.....	1,772 25
"Franklin" School House (Addition)	248 29
Elizabeth Avenue School House (Addition) .....	2,351 17
Elliot Street School House (Addition)	6,384 75
South Tenth Street School House (Addition).....	19,967 75
Ridge St. School (Site and Building).	10 25
Hamburg Place School House (Annex)	134 31
Third Ward School (Site and Building) .....	36,337 66
Monmouth Street School House (Addition) .....	12,000 00
Elizabeth Avenue School House (Additional Ground).....	11,000 00
Lock Street School House (W. C.)...	1,200 00
Morton Street School House (W. C.)..	1,000 00
Lafayette St. School House (W. C.)..	1,000 00
Burnet Street School House (Addition)	1,000 00
	<hr/>
	\$96,422 28



TABLE OF EXPENSES OF THE VARIOUS SCHOOLS FOR 1895.

SCHOOLS.	Salaries of Teachers.	Salaries of Janitors	School Books, Stationery and Printing.	Repairs.	Furniture and Supplies.	Heating Apparatus.	Fuel.	Miscellaneous.	Total.
Normal and Training—									
Normal Department.....	\$4,295 13	\$165 00	\$179 16	\$33 18	\$5 19	\$13 23	\$96 93	\$22 84	\$4,805 66
Training Department.....	6,373 37	495 00	246 19	99 53	90 60	39 72	200 82	68 49	7,613 72
High.....	33,405 81	1,030 00	1,928 85	196 38	112 83	41 28	304 30	149 13	37,108 58
High Annex (5 Wash'gton st.)	2,828 16	140 00	66 28	149 45	590 18	110 41	51 10	503 60	4,439 18
High Annex (103 " )	5,548 08	380 00	81 34	147 50	20 66	24 85	73 70	859 98	7,136 11
Burnet Street Grammar....	7,041 25	420 00	533 19	522 66	49 25	16 67	125 10	103 56	8,811 68
Burnet Street Primary.....	6,082 25	420 00	162 65	522 64	49 26	16 67	125 10	103 57	7,482 14
State Street Primary.....	7,231 31	660 00	192 70	323 00	113 02	44 44	230 30	44 12	8,838 89
James Street Industrial.....	2,593 22	300 00	35 76	2 32	36 11	15 20	104 00	201 20	3,287 81
Webster Street Grammar....	2,332 15	250 00	131 69	118 35	14 80	12 74	36 67	56 63	2,923 03
Webster Street Primary....	5,910 20	650 00	111 75	190 78	53 11	30 07	204 83	124 21	7,274 95
Washington Street Grammar	7,536 18	557 12	720 54	245 75	54 43	89 16	227 65	87 32	9,518 60
Washington Street Primary..	3,753 70	342 88	102 06	161 46	36 16	50 99	150 10	56 50	4,654 25
Marshall Street Primary.....	3,626 35	540 00	93 17	71 63	9 68	28 05	146 05	20 28	4,535 21
Morton Street Grammar.....	5,675 27	319 24	507 53	165 10	55 66	32 75	217 82	74 40	7,037 77
Morton Street Primary.....	10,243 86	638 36	498 98	330 25	111 32	65 50	435 63	148 84	12,382 74
Broome Street Primary.....	2,082 09	302 40	50 20	29 65	9 48	10 55	48 40	423 00	2,936 15
Court Street Primary.....	891 47	150 00	58 28	25 40	63 43	44 02	60 85	180 60	1,474 65
Monmouth Street Primary...	12,061 40	900 00	455 85	207 17	119 22	121 87	426 30	73 80	14,965 61
Lawrence Street Grammar...	5,809 08	507 00	400 10	207 26	130 56	43 77	194 10	86 06	7,377 93
Lawrence Street Primary....	3,229 71	388 00	73 84	150 11	125 55	37 72	158 90	76 43	4,240 26
Commerce Street Primary....	3,661 20	420 00	71 30	195 40	97 31	269 06	239 75	136 00	5,090 02
Colored.....	3,474 02	360 00	173 29	104 97	34 56	3 35	29 50	10 80	4,190 49
Chestnut Street Grammar...	6,656 05	450 00	673 11	203 52	48 11	513 36	175 25	54 92	8,774 32
Chestnut Street Primary....	6,490 54	450 00	329 71	203 52	48 12	513 36	175 25	54 92	8,265 42

Lafayette Street Grammar...	4,951 04	333 36	434 06	268 00	38 01	6 48	88 99	21 66	6,141 60
Lafayette Street Primary...	7,741 39	626 64	159 04	510 86	71 37	12 02	167 11	42 08	9,334 08
Clover Street Industrial .....	1,409 84	240 00	30 03	30 75	28 60	5 35	21 00	201 80	1,997 37
South Eighth St. Grammar...	7,297 84	517 52	331 93	388 93	85 41	58 56	215 70	51 00	8,946 89
South Eighth St. Primary...	5,288 27	382 48	102 01	290 81	65 40	41 01	157 80	38 92	6,397 60
Thirteenth Ave. Grammar...	1,762 64	94 12	599 62	88 61	54 79	4 36	59 78	106 72	2,678 73
Thirteenth Ave. Primary...	10,800 67	865 88	643 67	259 66	155 19	62 24	435 73	14 71	13,319 76
Central Avenue Grammar...	5,087 80	385 68	199 99	453 08	24 17	12 89	163 54	54 64	6,381 79
Central Avenue Primary...	5,919 50	514 32	156 25	604 17	32 23	17 21	218 31	72 92	7,534 91
Lock Street Primary .....	3,093 25	486 00	52 77	22 26	28 68	29 35	117 30	17 53	3,840 54
Warren Street Primary .....	5,485 33	720 00	263 77	143 58	88 63	5 50	371 00	40 21	7,118 02
Wickliffe Street Primary...	3,100 13	600 00	74 76	88 57	85 71	49 12	102 66	12 60	4,113 55
Wickliffe St. Annex Primary...	1,235 33	200 00	6 47	.....	1 26	.....	22 00	166 67	1,631 73
Summer Avenue Grammar...	6,654 75	450 00	469 85	90 02	13 73	45 13	271 49	61 28	8,050 25
Summer Avenue Primary...	5,438 91	450 00	124 25	90 03	13 73	45 12	271 51	61 30	6,494 85
Elliot Street Primary .....	6,849 02	670 00	562 94	41 58	30 08	30 05	240 65	27 81	8,452 13
Ridge Street Primary .....	1,509 87	300 00	120 46	70 11	45 63	14 90	41 50	890 64	2,093 11
Miller Street Grammar .....	6,917 26	434 62	612 65	477 09	89 25	44 21	215 50	79 73	8,870 31
Miller Street Primary .....	5,680 22	415 38	203 01	426 39	79 33	39 18	202 25	77 01	7,122 77
Elizabeth Avenue Primary...	1,848 54	360 00	120 81	143 23	1,158 07	88 65	173 30	31 77	4,722 37
Charlton Street Primary .....	1,910 49	428 00	552 02	289 99	1,504 69	2,953 45	241 00	47 77	7,927 41
Oliver Street Grammar .....	7,182 23	514 32	634 82	386 30	136 40	8 54	189 73	66 88	9,119 22
Oliver Street Primary .....	4,627 33	385 88	169 81	289 95	102 24	6 41	142 47	50 18	5,714 07
South Street Primary .....	7,565 80	780 00	189 84	504 75	87 50	30 14	242 00	176 80	9,576 83
Walnut Street Primary .....	5,584 60	720 00	142 42	370 86	54 84	17 07	145 25	24 45	7,059 49
Ann Street Primary .....	6,654 55	720 00	178 37	339 72	26 29	65 92	443 20	139 14	8,507 19
North Seventh St. Grammar...	3,711 83	315 40	521 76	556 74	56 71	386 39	205 24	25 24	5,779 31
North Seventh St. Primary...	6,166 56	584 60	310 38	971 33	105 64	769 01	374 01	48 57	9,270 10
Roseville Avenue Primary...	4,833 64	600 00	100 54	388 99	30 55	11 75	162 50	47 45	6,175 42
South Market St. Grammar...	4,556 27	375 00	442 97	682 80	63 07	5 46	113 19	23 94	6,262 70
South Market Street Primary...	5,655 36	525 00	158 34	956 08	88 32	7 64	158 81	33 51	7,583 06
Hamburg Place Grammar...	5,190 56	385 68	502 46	291 98	36 28	107 86	153 39	47 86	6,716 07
Hamburg Place Primary...	6,448 41	514 32	293 41	389 88	48 45	144 14	204 81	63 81	8,107 23
Hawkins Street Primary...	5,452 69	720 00	181 77	539 36	31 65	12 85	241 50	95 26	7,275 08
South Tenth Street Primary...	11,243 63	960 00	404 04	202 05	96 45	68 55	286 00	63 38	13,265 00
Holland Street Primary .....	722 81	80 00	8 36	.....	10 50	50	20 30	121 00	993 47
Camden Street Primary .....	10,770 03	780 00	475 55	232 93	51 59	112 02	224 38	47 35	12,693 85
Waverly Avenue Primary...	5,948 30	720 00	282 60	238 23	21 51	155 96	451 95	52 08	7,870 63

TABLE OF EXPENSES OF THE VARIOUS SCHOOLS FOR 1895.—Continued.

SCHOOLS.	Salaries of Teachers.	Salaries of Janitors.	School Books, Stationery and Printing.	Repairs.	Furniture and Supplies.	Heating Apparatus.	Fuel.	Miscellaneous.	Total.
Fifteenth Avenue Primary....	\$2,177 32	\$585 16	\$463 14	\$174 44	\$1,466 08	\$2,457 50	\$434 80	\$48 03	\$7,746 47
Newton Street Grammar.....	7,906 56	554 16	702 96	793 25	95 29	69 49	287 07	45 52	10,364 30
Newton Street Primary.....	6,661 83	405 84	243 38	495 26	74 71	52 49	213 43	32 52	8,179 46
Eighteenth Avenue Grammar	6,300 33	404 16	454 07	186 59	41 76	30 11	235 65	27 17	7,682 81
Eighteenth Avenue Primary....	8,221 32	555 84	270 38	260 73	57 39	41 40	324 03	37 37	9,768 46
Livingston Street Primary....	2,440 10	300 00	24 41	22 42	5 65	6 60	66 32	603 00	3,477 50
" Franklin " Grammar.....	2,257 77	150 00	497 56	69 85	952 46	1,306 85	166 63	17 36	5,418 48
" Franklin " Primary.....	6,455 01	630 00	216 39	87 26	1,181 81	1,424 04	275 37	70 38	9,290 26
Bloomfield Avenue Primary..	786 03	200 00	12 27	.....	50	.....	8 70	266 67	1,274 17
Evening High.....	2,527 50	72 00	296 25	10 78	45	.....	.....	141 02	3,048 00
Webster Street Evening.....	2,229 50	66 75	142 21	.....	45	.....	.....	295 44	2,734 35
Morton Street Evening.....	3,135 22	94 50	268 26	.....	6 20	.....	.....	363 90	3,868 08
Lafayette Street Evening.....	1,818 75	52 50	104 18	.....	45	.....	.....	327 04	2,302 92
Central Avenue Evening.....	1,824 25	52 50	52 70	33 00	30	.....	.....	180 36	2,143 11
South Street Evening.....	616 00	20 25	54 62	.....	15	.....	.....	55 00	746 02
South Market Street Evening.	1,831 00	53 25	81 39	.....	45	.....	.....	270 30	2,236 39
South Tenth Street Evening	1,682 00	48 00	51 24	.....	.....	.....	.....	129 99	1,914 73
Newton Street Evening.....	1,698 25	48 00	61 87	.....	.....	.....	.....	255 19	2,063 31
Eighteenth Avenue Evening	1,766 25	50 20	64 25	.....	.....	.....	.....	163 01	2,043 01
Evening Drawing.....	3,264 50	375 00	78 80	5 85	48 45	2 60	34 70	1,423 40	5,233 30
James Street Summer.....	113 25	6 00	19 34	.....	.....	.....	.....	.....	138 59
Webster Street Summer.....	161 75	9 00	15 14	.....	.....	.....	.....	.....	185 89
Morton Street Summer.....	697 75	42 00	74 28	.....	.....	.....	.....	.....	814 03
Wickliffe Street Summer....	208 25	12 00	25 81	.....	.....	.....	.....	.....	246 06
Hamburg Place Summer.....	383 75	21 00	4 18	.....	.....	.....	.....	.....	408 93
South Tenth Street Summer..	382 25	21 00	16 57	.....	.....	.....	.....	.....	419 82
Newton Street Summer.....	473 00	27 00	12 10	.....	.....	.....	.....	.....	512 10
Eighteenth Avenue Summer..	504 75	20 00	86 91	.....	.....	.....	.....	.....	620 66

All of which is respectfully submitted,

R. D. ARGUE, *Secretary.*

H. J. ANDERSON, *President.*



PART II.

REPORT OF THE CITY SUPERINTENDENT.



## REPORT.

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*To the Honorable the Board of Education of the City of Newark:*

GENTLEMEN:—The Superintendent has the honor to submit the Thirty-ninth Annual Report of the Public Schools.

In a prosperous and growing city the demands of the the public schools are constantly increasing. The many and continually extending advantages for homes and business offered by our beautiful city are bringing many families and business interests here. Of course, among the influences that help to build up a community, none are more effective than good schools. Merely to keep them up to the present standard is not sufficient. Progress in the course of study and in methods of teaching must be constant and up to date. The accommodations in the way of school room and all facilities pertaining to appliances of all kinds necessary for the most efficient grade of instruction should be amply supplied. The mere matter of cost should not deter the Board from making this most important of all investments in the sound interests of our city. It is the duty of the Board to aid in surrounding our children with the best environment that shall conduce to their physical, intellectual, moral and aesthetical good.

We should not forget that the schools are for the children and not merely a convenience for the teachers and others connected with them. It is in these schools

that the pupils are trained in the acquirement of useful knowledge, the development of their powers of body and mind, and how to apply them in the various callings they may enter.

There is no more important duty devolving upon a community than the thorough training and education of the children to become true, noble and honored men and women, capable of filling their places and performing their duty in this American republic. It is for this purpose that this public school system is organized and maintained.

The Superintendent's attention from year to year has been more and more given to the question, how to elevate and increase the efficiency of the public school system of our city? This cannot be settled by considering and using only the means furnished by school room accommodations and the various appliances required in the proper instruction of the pupils. As we have so often said and again repeat, the one great necessity in every system of schools is the thoroughly trained, competent teacher. This is the way out of all the difficulties that beset the educational problem.

In the education and training of our teachers it can hardly be questioned but that we are moving in the right direction. There has been more interest and activity among the teachers in preparation for the class room and personal contact with the child than during any time in the past. While some have failed to catch the spirit, the body as such has made right and commendable progress. Here is the key to the whole subject. Teachers deeply interested, competent and thoroughly trained will soon put our schools in the way of rapid and sound progress. This competency and training means much more than



mere surface preparation in methods and simple devices. First, it means large natural fitness by quick intelligence, great tact and aptness, joined with ample scholarship and good habits of mind and body, with the devotion and persistency of the genuine student.

The meetings of the teachers for educational purposes with the principals, the Superintendent, in grade meetings for special subjects, in the institutes, etc., have been unusually well attended and have resulted in permanent benefit to the profession. I wish just here to emphasize these gatherings. One of their chief benefits is, they keep alive, intensify and extend the professional spirit. They arouse and utilize the personal and mutual efforts of those who come under their influence. We hope to improve them and thus derive still larger benefits from them.

The Superintendent's meetings with the principals, the principals with their class teachers, the Principals' Association, the Vice-Principals' Association, the Teachers' Institutes, the grade meetings by the drawing teacher and the music teachers, have all been held regularly. They were well attended and commanded the attention of all. These meetings are growing in interest and value from year to year.

## PRESENT CONDITION OF SCHOOL ACCOMMODATIONS.

One of the troublesome questions for every growing municipality is the difficulty of furnishing adequate facilities for the proper education and training of the children. This is not a local complaint; it is wide-spread throughout the country. It is not easy to understand why cities so generally fail to make early and ample pro-

vision for their schools. Wisdom would seem to say that sites should be purchased and buildings arranged for in advance of the crowded population which makes it so difficult and expensive to properly locate the school buildings.

The school authorities should study with care and foresight the growth and trend of the population in all directions. This is most thoroughly done in all the other business interests of the city. Education should not hold a second place in the provision for and the management of the affairs of a municipality.

I find that the criticism of the lack of most of our large cities to provide the necessary accommodations for the education of the children is very severe. This neglect has become practically criminal.

Permit me to give a few facts and figures taken from various school reports. The condition of the schools in Brooklyn was miserable in 1893. In 1894 it was disgraceful, as the following extract from the report of Superintendent Maxwell will show :

“The number of pupils on register in all grades exceeded the total seating capacity by 3,630. The number of pupils on register in primary grades exceeded the seating capacity of our primary class rooms by 6,322.

It should be remembered that, dreadful as is the condition of crowding shown by these figures, they tell only part of the truth. They represent an average, and not extreme cases ; they show the register, not when it is at its highest, but when, in midwinter, it is almost at its lowest. To appreciate fully the enormity of the evils caused by lack of sufficient school accommodations, it is necessary to take the register when it is at its highest—in the month of October—and to consider, not average

conditions, but particular cases. In October, 1893, there were 377 classes whose registers exceeded 60; in October, 1894, there were no less than 447 classes whose registers exceeded 60. Of these 447 classes, there were 278 that had registers between 60 and 70; 89 that had registers between 70 and 80; 17 that had registers between 80 and 90; 12 that had registers between 90 and 100; 10 that had registers between 100 and 110; 10 that had registers between 110 and 120; 16 that had registers between 120 and 130; 11 that had registers between 130 and 140, and 4 that had registers between 140 and 150. Each of these overcrowded classes was kept in one room and had but one teacher."

Jersey City is suffering sorely on account of insufficient school room which, of course, leads to much overcrowding of class rooms besides leaving a large number unable to gain admittance at all.

Washington, D. C., is in almost as unsatisfactory a condition as to accommodations as is Brooklyn. The President of the Board of Trustees of the Public Schools, in his report to the commissioners, makes the following statements:

"It will be observed that these unfortunate conditions result solely from the failure to supply adequate school room accommodations. A sufficient number of teachers is provided for all the schools, and if we had as many school rooms as are needed, every child now in attendance could receive the benefit of a full day's schooling without the employment of a single additional teacher or the expenditure of a single additional dollar for teachers' salaries. As was pointed out on a former occasion, we occupy precisely the attitude, from a business standpoint, of an employer who finds it necessary to engage and pay

the wages of 1,000 skilled employees, but who receives the benefit of only half-days' labor from a third of their number because of his own refusal to provide working room for them all."

Nearly the same can be said of the schools in Baltimore and Philadelphia. I note these facts to show how general it is in our large cities to neglect this important duty, also to show the contrast between these and many other cities and our own city. While Newark is behind in certain localities and has much to do, she has no such conditions in her schools as have been shown in the foregoing references. I can say more. The present commendable activity of the Board of Education, under its present vigorous administration, will soon supply every section of our city with ample school room for all the grades included in the public school system.

Permit me, for a special purpose, while making these comments and citations, to call attention to the condition of the schools of the great inland city of Chicago. It has, probably, greater difficulties to contend with than almost any other city in the world. It has the greatest annual increase in population of any city on record. This city is growing at the rate of 65,000 yearly. Thirteen thousand of these are children that must be provided for in the schools. It requires fifteen large new buildings to accommodate this annual increase.

But now comes the point to which I wish to direct attention. Fortunately, the Board of Education of that great city is not hampered, as are many cities, by the solution of the problem of how to secure the money necessary to build these school houses. The Board is not dependent on Councils for school moneys. It is empowered by the legislature to make a five per cent levy



on the real estate for school purposes, two-fifths of which can be used for salaries and the remaining three-fifths for building purposes. This is sufficient to provide ample and comfortable accommodations for every child of school age in the city.

As a result of this, during the year ending June, 1895, 16 new school buildings were opened and 21 more begun. For 1896 it is planned to build 25 commodious school houses. I mention these facts to illustrate how quickly and easily energy and just liberality will remove apparently insurmountable difficulties. I am satisfied that Boards of Education should be able to command the means necessary to provide for the proper education of every child of school age within the limits of the municipality.

The Superintendent can say without hesitation that the condition in general of the school buildings in this city is creditable to the Board and especially so to the committees having particular charge of the construction and repairs of the buildings.

The past year has been one of unusual activity in completing the buildings begun the year previous, viz.: Charlton Street and Fifteenth Avenue, and enlarging the "Franklin" and Elizabeth Avenue schools.

There are at present twelve unoccupied class rooms, located as follows: Webster Street, four; Marshall Street, one; Commerce Street, one; Ridge Street, one; Elizabeth Avenue, two; South Street, two; Hawkins Street, one. The two vacant rooms in North Seventh Street last year are now in use; also the two in Wickliffe Street. The removal of the grammar school from the Webster Street building to the "Franklin" school, last September, has left four vacant rooms in the Webster Street house.

The sanitary condition of the schools is coming to be

quite satisfactory in most respects. The committees having in charge the repairs, heating and ventilating, furnishing, sanitation and improvements in general, have performed their duties promptly and efficiently. The efforts to improve the convenience and sanitary condition of the water closets of the schools are in the highest degree commendable, and while, perhaps, all the success desired has not as yet been attained, good direction has been given to that work. Time and persistence will, without doubt, bring a more complete success.

The needs of the Normal and Training school have been many times presented in the annual reports. While these needs are becoming, from year to year, more and more urgent, they need not be again presented here. We shall notice this institution again under the proper heading. The same may be said of the High school, including its annexes.

The grammar and primary schools of the First Ward are Burnet Street, James Street, State Street and Webster Street. They are in general good condition. Burnet Street has suffered for years past from insufficient light in several of the rooms. This difficulty is now about to be removed by a rearrangement and increase of window space. When this contemplated improvement shall be completed, all the class rooms will be well lighted as to quantity, direction and distribution. Another improvement which has long been needed is also in process of accomplishment, viz.: A suitable teachers' room. Here is a school of sixteen classes with sixteen teachers, and only one very small room in an out-of-the-way location for their accommodation. A fine, large, and in every way commodious room is to be constructed and properly fitted up for the teachers' use.

This, without doubt, will be greatly appreciated by those who have been so long without it.

State Street is well occupied with ten classes and is well taken care of by those in charge. One room in the southeast corner, on the ground floor, is somewhat troubled for want of light on account of an adjoining building. This is an emphatic argument in favor of ample ground room surrounding all our school buildings. The Board cannot be too careful in this respect.

But eight rooms of the Webster Street house have been occupied since the opening of the school year last September. This, as has been stated, is the result of making Franklin School the grammar school for that district. This took some five or six classes from Webster Street. These rooms will, no doubt, soon be needed for primary children in that section of the city. I expect one and possibly two more classes will be necessary at the opening of the April term.

The surroundings of this house are not at all in keeping with the just demands of good school premises and the patrons of that school. I would urgently recommend that the Board take the necessary steps to have Webster and Crane streets paved with asphalt. This is both a noiseless and sanitary pavement. The dirty and unsanitary condition of these streets are a disgrace to the neighborhood and a menace to the school, and should without delay be corrected.

The grammar and primary schools in the Second Ward are Washington Street and Marshall Street. These schools are in need of some attention, which the Repair Committee has recently given to them. The out-buildings and the fences of Washington Street School have been put in good order. Some painting and cleaning of the walls of class rooms are still needed.

The closets in the yard of the Marshall Street School are in a very bad condition on account of want of proper drainage and sewer connection. These will doubtless soon be supplied and the difficulty will be corrected. As has been stated heretofore, the old rooms in this house are not well adapted to class room work.

I would suggest to the Board that the Marshall Street property be sold; also the small lot fronting on Kinney street, from the Washington street premises, and that two or more lots be purchased on the north side of same premises. This would improve the yard room very much. Also that the rear of the Washington Street house be reconstructed and extended so as to add two or three class rooms, a suitable passage hall, with cloak rooms sufficient to properly care for the children's clothing. The clothing is now hung in the class rooms, which is wrong and should never be done. The present class rooms are very poorly ventilated. This reconstruction would greatly improve the school accommodations for this district, and would, without doubt, be ample for years to come.

It was thought when Charlton Street School was organized that the annexes on Broome Street and Court Street could be abandoned. Court Street was closed up, but unexpectedly, to us all, Charlton Street was filled to overflowing the first day of the opening. A readjustment of the district lines became necessary, and in a short time Court Street annex was again leased and two classes organized.

All the schools in the Third Ward are crowded and additional school room is very much needed. The Building Committee promptly took steps leading to the purchase of the lots on Morton and Howard streets and College place, adjoining the Morton Street School; also



providing for an additional story on the Monmouth Street house. These enlargements and additions will greatly relieve this section.

The schools in the Fourth Ward are Lawrence Street, Commerce Street, Colored School and Chestnut Street. They are in a fairly good condition and meet all the demands made upon them. The Commerce Street School has one vacant class room. The school is almost entirely made up of Italian children. The population of this section is largely of this nationality. The building is a great convenience in this neighborhood. The Board does well to make good and liberal provision for this class of children. I find the parents are, many of them, sending their children to the public schools. This is as it should be, and by every means possible should be encouraged. The schools can do what legislation and police supervision cannot, viz.: inculcate a patriotic spirit and respect for our government and its institutions.

The Colored School is in as good condition as the building and the surroundings will permit. The light on the west side of the building is seriously obstructed by the proximity of a large brick building. This can be very much improved by painting with a light color the wall opposite the school windows. The expense will be trifling and the work should be done at once. In other respects the house answers its purpose very well.

Chestnut Street, one of our large and well attended schools, while it accommodates, as to room, its patrons, needs some improvements within the building. The laying of the asphalt pavement on Chestnut street has proved a great comfort to the pupils and teachers in largely removing the noise of the street. I would take this opportunity to call the attention of the Board of

Education and the Board of Works to the advantages to our schools, on or near the great thoroughfares of the city, in having, if possible, asphalt pavements laid in those streets. Much disturbance and annoyance in the schools can be avoided by such arrangement.

The schools of the Fifth Ward are Lafayette Street and Clover Street Industrial. A much needed water closet has been erected in the boys' yard of Lafayette Street. The accommodations in this respect for said school are now satisfactory in all respects. The furnace room is in bad condition and should be remodeled without delay. The entrance is inconvenient, the light very deficient, the arrangement for coal and the cleaning of the furnace such as to make it very laborious and difficult for the janitor to do his work properly in the boiler room.

This is a large school, containing fifteen class rooms, and is lacking in some of the modern conveniences that the newer schools possess, in the way of hallways and closet rooms for teachers and rooms for supplies. All the inside blinds should be removed and their places supplied with curtains hung to run up and down from the middle of the window.

The indications are now that this house will soon be insufficient to meet the increase in school population. I am informed that the adjoining lot on the east side of the premises can be purchased at a reasonable cost. In my opinion this should be done at an early day. The Board always does well, when it can, to enlarge the limits of our school grounds. This is the most satisfactory way to protect the schools in the matter of light, air and the general surroundings.

The Clover Street house is not well adapted to school purposes. It contains two class rooms, not well venti-

lated nor judiciously warmed. The yard and out-buildings are not at all adequate to the needs of the pupils. The surroundings are not favorable or helpful to the school.

This school, at the opening of the school term last September, was placed under the charge, as principal, of Mr. Fort, of Hamburg Place. This has proven a great help to the school in many ways.

The schools of the Sixth Ward are South Eighth Street and Thirteenth Avenue. Both buildings are in very good repair. South Eighth Street still uses three rooms in the court for classes. We thought when North Seventh Street house was completed and the Fifteenth Avenue School organized we should be able to give up the use of the rooms in the court, but such has not been the case. This is a very rapidly growing district in population, and it seems almost impossible to keep abreast of the demand for school room. This building is one of our large and well constructed houses. The larger part of the courts has been used for years for class rooms. In my opinion this is wrong. If these class rooms must be located permanently near the ground, the floor should be raised and properly protected from the dampness. This can be easily done, as the ceilings are high and the windows large. These rooms should be either abandoned for class room purposes or put in proper condition for such use.

The Thirteenth Avenue School is in excellent condition as to repairs and equipment. It contains seventeen fine class rooms, all well lighted, well warmed, ventilated and furnished. The eighth grade class room has been furnished with single desks.

The demand for admission to this school exceeds the capacity of the house. The question has already arisen

how to increase the accommodations. The proposition is made to add six rooms to the house on the Richmond street side of the lot. This can be done without seriously interfering with the light and ventilation. As the school population is rapidly increasing in this locality, this addition will bear consideration.

The schools of the Seventh Ward are Central Avenue, Lock Street, Warren Street and Wickliffe Street. These buildings are in fairly good condition and are able to meet all calls for admission at the present time. The vacant rooms that existed last year and at the opening of the present school year have been filled with good sized classes. A district can now be definitely mapped out for Wickliffe Street School which can be made to help relieve Thirteenth Avenue, Newton Street and the Training Schools. This should be done at once and the pupils so assigned required to attend in their own district. This will utilize the good accommodations in the Wickliffe Street house permanently. There can be no objection to the class rooms in the house; they are of good size, well lighted and warmed.

Summer Avenue, Elliott Street and Ridge Street Schools are located in the Eighth Ward. Two of the classes that have been for some time accommodated, temporarily, in the assembly room of the Summer Avenue house, have been removed from there to Webster Street and Franklin Schools, leaving fourteen classes in Summer Avenue School. We hope soon to relieve the audience room entirely from classes. I would again recommend that the two unfinished rooms on the third floor be finished and furnished for use. These rooms will be among the finest in the house. The general condition of this house is good. It is one of the best school buildings in



the city. The class rooms are large and excellently well lighted. Single desks can be placed in any of the rooms without crowding the aisles. I take opportunity here to enforce the importance of large class rooms for seating convenience, breathing space, physical exercises and the better to facilitate the movements of the school. This is a matter of great moment to our children and teachers. I trust that the tendency to reduce the size of class rooms will not continue.

Elliot Street building is now receiving an additional story of five rooms, making this a fourteen room school. It now contains the eight primary and grammar grades. A new water closet has been placed in the boys' yard. When the improvements now under way shall be completed, this will be a commodious and well equipped house, beautifully located. In connection with the four room house on Ridge street, for primary pupils in the Forest Hill section of the district, nineteen class rooms will be at the service of this part of the city. These will accommodate the children in this section for several years.

Miller Street, Elizabeth Avenue and Charlton Street are in the Ninth Ward. Miller Street has been materially relieved by the enlargement of Elizabeth Avenue to six rooms and the transfer of two classes to this house. A fine teachers' room has been finished and furnished for Miller Street School. Also new wooden ceilings have been put in a number of the rooms, greatly improving them as to appearance and safety. The primary room on the first floor has been entirely reconstructed, making it a fine room for kindergarten work, if desired for that purpose. When the walls throughout shall be painted, this house will be in first class order.

Elizabeth Avenue is now a six room house. The class rooms are as fine as any in the city, being of good size and exceedingly well lighted. The need of this improvement is already apparent.

The necessity at an early day for a large grammar and primary school here is now clearly manifest. The Board did wisely in purchasing additional land while it could be secured at a reasonable price.

The Charlton Street School was opened at the beginning of the school year, September last, although the house was not fully completed nor the yards enclosed. The class rooms were, unexpectedly, all of them filled to overflowing. Instead of organizing, as we planned, five classes, we established eight—about five hundred pupils. A readjustment of the boundary lines became at once necessary. This returned a large number of children to Monmouth Street School, making it in the end necessary to reopen the annex on Court street. The school house is now completed and the school thoroughly organized, the classes being full and very regular in attendance. Steps should be taken, at once, to construct the eight rooms contemplated in the plan, making it a sixteen room house. This room will be needed before it can be built, if work be begun at once. In my judgment it is unwise to build small buildings in these populous and rapidly growing sections. We need from sixteen to twenty room houses, and then we can scarcely meet the demand.

The schools in the Tenth Ward are Oliver Street, Walnut Street, South Street and Ann Street. These houses are all in very good condition. The Repair Committee has been very active in keeping the school buildings up to a good grade of repair.

Oliver Street, Walnut Street and South Street can

more than meet the demands upon them for admission, but Ann Street cannot. I think some rearrangement of lines between Ann Street and Walnut Street can be made whereby some pupils can be accommodated in Walnut Street. This, however, will be only temporary.

The addition of the contemplated eight rooms to Ann Street house should be provided for without delay.

South Street has two vacant rooms still. This school is slowly growing, and I think will soon occupy at least one of these rooms. I think such readjustment of the lines can be made as will utilize the unused rooms in this ward.

The schools of the Eleventh Ward—North Seventh Street and Roseville Avenue—are in good condition and are well filled. The enlargement of the North Seventh Street house has become an urgent matter and should receive early attention.

South Market Street, Hawkins Street and Hamburg Place Schools supply the school accommodations for the Twelfth Ward. South Market Street is well attended. Hawkins Street still has a vacant room. The other classes are not by any means crowded. The chief reason why this school is not better attended is the unopened streets leading from the south part of the district. These streets cannot be used by the school children, thus compelling them to travel a long distance to reach a street leading to the school house. This long journey takes them directly past the South Market Street School. Parents insist upon their children attending South Market Street instead of passing on by it. This, of course, tends to overcrowd this school. Application has been made by the Committee on School Houses to the Board of Works to open Kossuth, Berlin or other streets leading

directly to the Hawkins Street School. The promise has been given to have the work done. When this is accomplished I think there will be no further trouble in filling the Hawkins Street house. This work should be urged until done.

The Hamburg Place School has been for a long time very much overcrowded. The Board owned the lot adjoining on the east, with a good frame house, which has been reconstructed and finished into four fine, large, well lighted class rooms. These rooms now contain classes of over fifty each, upwards of two hundred pupils. This arrangement has very much relieved the Hamburg Place School for the present. I am certain, however, that next term will tax both buildings to their full extent. I would again urge the importance of enlarging the Ann Street house as soon as practicable.

The schools in the Thirteenth Ward are the South Tenth Street, Camden Street, Waverly Avenue and Fifteenth Avenue.

The South Tenth Street house consists of two parts—a brick structure and a frame structure. The brick section contains nine legitimate class rooms, and one room in the court, which should not be used for such purpose. This part of the house is in very good repair, and very well furnished, lighted and warmed. The frame section, containing six class rooms, is in very poor condition as to repair, light, roof, protection, etc. Through the winter season much trouble is experienced by leaking through the roof and at the junction of the two parts of the house.

Money has been appropriated and plans drawn and adopted for a brick addition on Holland street, containing some eight class rooms and an assembly room. The esti-



mates considerably exceed the appropriation, and in consequence thereof the work is delayed for the present. This should, however, be completed as promptly as can be. When the addition shall be finished this will be a very fine, commodious house, much needed, and without doubt will be greatly appreciated by this now populous and rapidly growing district.

Camden Street School is in good condition generally. It has two class rooms in the court that accommodate about 120 children. The great objection to these rooms in the courts, is the children are too near the ground and they are not always well lighted. If such room be used the floor should be raised somewhat from the ground, that dampness may be avoided. The attendance here is up to the capacity of the house.

Waverly Avenue house is in good repair and excellently well taken care of by those in charge. The building, however, cannot accommodate all that are entitled to admission. The necessity of completing this house, under the plan of sixteen rooms, is manifest. These districts in this section of the city are very populous and steadily growing. There should be no delay in providing ample school facilities. I would urge this enlargement as a part of the general plan for providing for the schools needed here, including Morton Street, Monmouth Street, Charlton Street and Eighteenth Avenue. This can all be done without the purchase of more land, except for Morton Street. These facilities will be ample for some time to come.

The Fifteenth Avenue building was occupied at the opening of the school year, September last. Although the house was not fully completed and equipped, the school was organized with eight classes, full to overflow-

ing. It was found necessary to adjust the boundary lines between Fifteenth Avenue and South Tenth Street Schools, as more pupils were assigned to Fifteenth Avenue than could be accommodated. This house is one of our finest, and is greatly appreciated by the residents of that part of the city. Already we realize the fact that very soon the additional eight rooms will be needed. The school is well organized and very regularly and punctually attended. The new water closets in this and Charlton Street School are experiments. Some considerable trouble was experienced in getting them into working order. Of course, it will take time to thoroughly test them. I doubt, however, if the experiment will soon be repeated. The purpose of the Board to improve the sanitary condition of the yard buildings is commendable, and efforts to that end should not be abated.

Newton Street, Eighteenth Avenue and Livingston Street Schools are in the Fourteenth Ward. They are in good repair and all well filled. They are among our good buildings. Newton Street is much pressed for room, and must soon be relieved, either by change of boundary lines or by additional class rooms.

Bloomfield Avenue, in the Fifteenth Ward, has been permanently abandoned by the Board, and the classes and the teachers transferred to the Franklin School. It was thought, possibly, some of the rooms in the Franklin School would not be used at present, but, on the contrary, when the school opened all the rooms were filled, some of them to overflowing.

In my opinion, the outlook for increased and improved accommodations for the school children of the city was never so bright as at the present time. The past year has been an unusually active one on the part of the various

Committees and the Board in this direction. Two new buildings have been completed and occupied. Two have been enlarged, one by an addition of eight rooms, one by an addition of four rooms and the enlargement of two other rooms. Also good provision for court accommodation. One is now receiving an added story of five rooms. The appropriation has been made, plans drawn and adopted, and all necessary steps taken to add eight rooms and an assembly hall to another house. Land has been purchased to enlarge several other school premises. Other purchases are now under consideration; also improvements of an important character. The condition of the school buildings throughout the city is a credit to the Board of Education. Again the Superintendent would urge and emphasize the importance of wise and prompt action by the Board in watching the extending population and growing needs of the school system of Newark.

### SCHOOL BUILDINGS.

The number of school buildings in use during the year ending June, 1895, was 50, containing the following schools and departments:

Normal School.....	1
Training School. ....	1
High School.....	2
Grammar Schools.....	17
Primary Schools. ....	43
Industrial Schools.....	2
Colored School.....	1
Total.....	<u>67</u>

The number of evening schools in operation was 10; 9 for five months and 1 for six, viz.: The Evening Drawing School, in the building located at 191 Washington street.

The Board now owns forty-four buildings, distributed as follows:

Ward.	No. of Buildings.	No. of Class Rooms.		Total.	Seating Capacity.
		Regular.	Temporary.		
1st.....	3	38	..	38	2,009
2d .....	4	47	..	47	2,166
3d.....	2	37	..	37	2,084
4th.....	4	38	..	38	1,880
5th ... ..	1	15	1	16	817
6th.....	2	29	4	33	1,838
7th.....	4	32	..	32	1,750
8th.....	3	25	2	27	1,492
9th .. ....	3	28	1	29	1,660
10th.....	4	42	..	42	2,288
11th.....	3	20	..	20	1,142
12th.....	4	38	..	38	2,069
13th.....	4	42	4	46	2,682
14th.....	2	36	1	37	2,017
15th.....	1	16	..	16	904
Total.....	44	483	13	496	26,798

In addition to the foregoing, the Board rents seven buildings, located as follows:

Ward.	No. of Buildings.	No of Class Rooms.	Seating Capacity
1st.....	3	16	704
3d.....	2	5	252
5th.....	1	2	84
14th.....	1	4	240
Total.....	7	27	1,280

This makes a total of 51 buildings, containing 523 class rooms, with a seating capacity of 28,078.

These figures show an increase over last year of 1 building, 28 class rooms and 1,401 seating capacity.

## CLASSIFICATION OF SCHOOL BUILDINGS BY CLASS ROOMS.

Number containing from 1 to 4 rooms.....	3
“ “ “ 4 “ 6 “ .....	6
“ “ “ 6 “ 8 “ .....	8
“ “ “ 8 “ 10 “ .....	10
“ “ “ 10 “ 12 “ .....	1
“ “ “ 12 “ 14 “ .....	4
“ “ “ 14 “ 16 “ .....	7
“ “ “ 16 “ 18 “ .....	8
“ “ “ 18 “ 20 “ .....	3
“ “ “ 21 “ .....	1

Total..... 51

## SCHOOL ACCOMMODATIONS FOR THE LAST FIVE YEARS.

Year.	No. of Buildings.		No. of	Seating	Increase in
	Owned.	Rented.	Class Rooms.	Capacity.	Seating Capacity.
1891..	37	5	439	23,613	753
1892..	39	4	467	24,814	1,201
1893..	39	7	476	25,581	767
1894..	40	10	495	26,677	1,096
1895..	44	7	523	28,078	1,401

## SCHOOL VISITATION.

The Superintendent made a large number of visits to the classes, as the following table will show:

### Normal and Training School—

Normal Department.....	45
High School.....	79
Grammar Schools.....	320
Primary Schools.....	621
Industrial Schools.....	12
Colored School.....	9
Evening Schools.....	39

Total..... 1,125



By reference to the foregoing record it will be seen that the Superintendent has given much time and attention to the primary and grammar schools, knowing, as he does, that they include by far the largest number of children in attendance upon our schools. Also, that very many close their school life with these departments. As a rule, these classes suffer more in consequence of insufficient school room. This fact is well known to the Board and is receiving proper attention.

The visits made by members of the Board are shown in the following table:

Normal and Training School—

Normal Department.....	14
High School .....	29
Grammar Schools.....	228
Primary Schools. ....	570
Industrial Schools.....	10
Colored School.....	16
Evening Schools.....	73
Total .....	940

Many of the members of the Board are quite frequent visitors to the schools, and are very watchful and active supporters of them in all their work.

We are honored frequently with visitors from other cities and states. They are received cordially, and every opportunity possible given them to become acquainted with the organization, management and instruction of the schools in all their departments and grades.

The Superintendent is in receipt of many invitations to visit the schools and educational institutions of cities and towns of our own state and other states. These invitations are acknowledged and accepted as far as consistent with the performance of duty at home.

## SCHOOL ENUMERATION.

Males.....	27,582
Females.....	27,052
Total.....	54,634

	Males.	Females.	Total.
1st Ward.....	2,982	2,913	5,895
2d ".....	2,614	2,521	5,135
3d ".....	1,663	1,534	3,197
4th ".....	2,597	2,619	5,216
5th ".....	3,945	3,906	7,851
6th ".....	2,085	1,961	4,046
7th ".....	5,330	5,172	10,502
8th ".....	4,363	4,243	8,606
9th ".....	2,003	2,183	4,186
Totals.....	27,582	27,052	54,634

As the school census last year was taken according to the old, or nine ward divisions, it will be necessary to present all reports and comparisons on these lines.

The following table shows the increase or decrease in the different wards, as compared with the year 1894:

	1895.	1894.	Increase.	Decrease.
1st Ward.....	5,895	5,858	37	....
2d ".....	5,135	5,311	....	176
3d ".....	3,197	3,225	....	28
4th ".....	5,216	4,179	1,037	....
5th ".....	7,851	7,404	447	....
6th ".....	4,046	5,364	....	1,318
7th ".....	10,502	12,179	....	1,677
8th ".....	8,606	10,240	....	1,634
9th ".....	4,186	4,343	....	157
Totals.....	54,634	58,103	1,521	4,990
Net decrease.....				3,469

ENUMERATION, 1895.

WARD.	AGE.														TOTAL.
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
	to 6	to 7	to 8	to 9	to 10	to 11	to 12	to 13	to 14	to 15	to 16	to 17	to 18		
1st	Males..	384	235	279	256	237	229	201	218	197	177	200	156	213	2,982
	Females..	352	235	260	262	226	228	209	244	190	193	174	127	213	2,913
	Total....	736	470	539	518	463	457	410	462	387	370	374	283	426	5,895
2d	Males....	248	235	231	210	205	221	181	205	160	173	150	181	214	2,614
	Females..	248	188	219	216	207	210	173	201	162	164	158	162	213	2,521
	Total....	496	423	450	426	412	431	354	406	322	337	308	343	427	5,135
3d	Males....	382	130	189	133	142	117	137	59	92	46	88	57	91	1,663
	Females..	325	146	164	117	134	94	99	69	83	73	78	64	88	1,534
	Total....	707	276	353	250	276	211	236	128	175	119	166	121	179	3,197
4th	Males....	221	196	206	202	198	213	194	193	182	205	184	191	212	2,597
	Females..	235	198	198	186	204	194	190	213	193	201	193	195	219	2,619
	Total....	456	394	404	388	402	407	384	406	375	406	377	386	431	5,216
5th	Males....	338	305	318	359	342	325	292	344	265	302	260	256	239	3,945
	Females..	340	297	353	340	322	326	311	320	290	283	262	237	225	3,906
	Total....	678	602	671	699	664	651	603	664	555	585	522	492	464	7,851

ENUMERATION, 1895—CONTINUED.

AGE.

TOTAL.

WARD.

	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	TOTAL.
6th { Males...	200	162	171	194	168	156	178	181	160	129	144	109	133	2,085
{ Females...	185	163	154	179	158	180	155	149	130	126	141	111	130	1,961
{ Total...	385	325	325	373	326	336	333	330	290	255	285	220	263	4,046
7th { Males...	543	420	469	459	446	436	366	430	312	375	321	325	428	5,330
{ Females...	468	449	450	428	434	441	404	411	348	405	322	284	328	5,172
{ Total...	1,011	869	919	887	880	877	770	841	660	780	643	609	756	10,502
8th { Males...	401	389	431	366	377	371	332	342	300	274	259	257	264	4,363
{ Females...	391	398	392	395	323	381	308	331	248	279	269	248	280	4,243
{ Total...	792	787	823	761	700	752	640	673	548	553	528	505	544	8,606
9th { Males...	185	143	147	160	160	161	160	175	174	137	131	124	146	2,003
{ Females...	171	148	188	169	149	175	187	182	157	177	166	159	155	2,183
{ Total...	356	291	335	329	309	336	347	357	331	314	297	283	301	4,186
Summary...														
{ Males...	2,902	2,215	2,441	2,339	2,275	2,229	2,041	2,147	1,842	1,818	1,737	1,656	1,940	27,582
{ Females...	2,715	2,222	2,378	2,292	2,157	2,229	2,036	2,120	1,801	1,901	1,763	1,587	1,851	27,052
{ Total...	5,617	4,437	4,819	4,631	4,432	4,458	4,077	4,267	3,643	3,719	3,500	3,243	3,791	54,634

## NUMBER ATTENDING PRIVATE SCHOOLS.

The number of children reported as attending private schools during the year:

Males.....	4,939
Females .....	4,976
Total.....	9,915

The following table shows the number of children, by wards, reported as attending private schools:

	Males.	Females.	Total.
1st Ward.....	706	810	1,516
2d " .....	336	306	642
3d " .....	310	295	605
4th " .....	475	449	924
5th " .....	613	682	1,295
6th " .....	887	798	1,685
7th " .....	872	870	1,742
8th " .....	524	496	1,020
9th " .....	216	270	486
Totals.....	4,939	4,976	9,915

The following table shows the increase or decrease in the different wards, as compared with the year 1894:

	1895.	1894.	Increase.	Decrease.
1st Ward.....	1,516	1,459	57	....
2d " .....	642	993	....	351
3d " .....	605	757	....	152
4th " .....	924	881	43	....
5th " .....	1,295	1,071	224	....
6th " .....	1,685	1,509	176	....
7th " .....	1,742	1,944	....	202
8th " .....	1,020	1,228	....	208
9th " .....	486	614	....	128
Totals .....	9,915	10,456	500	1,041
Net decrease.....				541



Number of children reported as attending no school during the year:

Males . . . . .	6,710
Females . . . . .	<u>6,757</u>
Total . . . . .	13,467

This shows a decrease of 2,156 from the number reported for 1894, which was 15,623.

Number of children over ten (10) years of age unable to read:

Males . . . . .	73
Females . . . . .	<u>59</u>
Total . . . . .	132

Compared with 99, the number reported for 1894, an increase of 33 is shown.

Number of children under fifteen (15) years of age employed in factories or stores:

Males . . . . .	517
Females . . . . .	<u>401</u>
Total . . . . .	918

A decrease of 37 is shown from 955, the number reported for 1894.

Number of children unvaccinated:

Males . . . . .	891
Females . . . . .	<u>889</u>
Total . . . . .	1,780

Indicating a decrease of 949 from the number, 2,729, reported for 1894.

## Number of colored children :

Males.....	542
Females.....	567
	<hr/>
Total.....	1,109

Compared with 1,180, the number reported for 1894, a decrease of 71 is noted.

## Number of children who are deaf mutes :

Males.....	14
Females.....	12
	<hr/>
Total.....	26

These figures show a decrease of 2 from the number reported for 1894, which was 28.

WARD.		Number of children attending no school during the year.	Number of children over 10 years of age unable to read.	Number of children under 15 years of age employed in factories, mines or stores.	Number of children unvaccinated.	Number of colored children.	Number of children who are deaf mutes.
1st.....	Males...	667	..	36	56	1	..
	Females.	638	..	36	57	2	..
	Total...	1,305	..	72	113	3	..
2d.....	Males...	574	7	43	66	75	3
	Females.	585	4	38	64	81	1
	Total...	1,159	11	81	130	156	4
3d.....	Males...	489	..	2	..	38	1
	Females.	413	..	..	..	39	..
	Total...	902	..	2	..	77	1
4th.....	Males...	725	1	24	58	149	..
	Females.	767	2	20	48	139	1
	Total...	1,492	3	44	106	288	1
5th.....	Males...	1,005	16	89	177	69	4
	Females.	1,029	6	44	189	54	3
	Total...	2,034	22	133	366	123	7
6th.....	Males...	710	..	62	99	47	..
	Females.	653	..	39	103	59	..
	Total...	1,363	..	101	202	106	..
7th.....	Males...	1,646	38	114	326	17	3
	Females.	1,687	43	119	322	24	4
	Total...	3,333	81	233	648	41	7
8th.....	Males...	513	9	139	78	38	2
	Females.	568	4	100	77	23	3
	Total...	1,081	13	239	155	61	5
9th.....	Males...	381	2	8	31	108	1
	Females.	417	..	5	29	146	..
	Total...	798	2	13	60	254	1
Summary	Males...	6,710	73	517	891	542	14
	Females	6,757	59	401	889	567	12
	Total...	13,467	132	918	1,780	1,109	26

The following statement shows the number of children at each age reported as attending no school during the year:

Between 5 and 6 years of age.....	2,932
“ 6 “ 7 “ “ .....	1,445
“ 7 “ 8 “ “ .....	629
“ 8 “ 9 “ “ .....	336
“ 9 “ 10 “ “ .....	211
“ 10 “ 11 “ “ .....	129
“ 11 “ 12 “ “ .....	117
“ 12 “ 13 “ “ .....	166
“ 13 “ 14 “ “ .....	329
“ 14 “ 15 “ “ .....	1,050
“ 15 “ 16 “ “ .....	1,794
“ 16 “ 17 “ “ .....	1,976
“ 17 “ 18 “ “ .....	2,353
Total.....	13,467

The percentage, 13,467, the number of children attending no school, bears to 54,634, the whole school population, is 24.6 per cent. Divided as follows:

Between 5 and 6 years of age.....	.054
“ 6 “ 7 “ “ .....	.026
“ 7 “ 8 “ “ .....	.011
“ 8 “ 9 “ “ .....	.006
“ 9 “ 10 “ “ .....	.004
“ 10 “ 11 “ “ .....	.002
“ 11 “ 12 “ “ .....	.002
“ 12 “ 13 “ “ .....	.003
“ 13 “ 14 “ “ .....	.006
“ 14 “ 15 “ “ .....	.019
“ 15 “ 16 “ “ .....	.033
“ 16 “ 17 “ “ .....	.036
“ 17 “ 18 “ “ .....	.043

Of the 13,467 reported as attending no school, 4,377 are between the ages of 5 and 7 years, during which many parents prefer to keep their children at home, and 7,173 are over 14 years of age, of which, undoubtedly, a large number are legitimately employed, and have already received a fair amount of instruction, thus leaving 1,917, or 3.5 per cent. of the entire school population, not in school.

### SUMMARY OF SCHOOL CENSUS.

Year.	Enumeration.	Number attending private schools.	Number attending no school during year.	Number over 10 years of age unable to read.
1892...	52,636	8,529	11,840	140
1893...	56,894	9,171	14,723	85
1894...	58,103	10,456	15,623	99
1895...	54,634	9,915	13,467	132

Year.	Number under 15 years of age employed in factories, mines or stores.	Number of children unvaccinated.	Number of colored children.	Number who are deaf mutes.
1892..	831	2,315	....	19
1893..	1,090	2,314	....	24
1894..	955	2,729	1,180	28
1895..	918	1,780	1,109	26

We are indebted to Dr. A. B. Poland, State Superintendent of Schools, and Dr. Lloyd Wilbur, Supervisor of School Census, for the census information so fully and accurately furnished by them, for which our thanks are tendered.

### ENROLLMENT.

	Males.	Females.	Total.
Day Schools.....	14,861	14,906	29,767
Evening Schools.....	2,813	925	3,738
Totals.....	17,674	15,831	33,505



Increase in Day Schools.....	722
Decrease in Evening Schools.....	499

Net increase..... 223

The following table shows the enrollment, attendance, etc., in the different schools from September, 1894, to June 30, 1895:

Schools.	Enrollment.	Average Enrollment.	Average Attendance.	Per Cent. of Attendance.
Normal and Training				
Sch.—Normal Dept.	79	76	72	94.7
High School.....	1,129	987	910	92.1
Grammar Schools....	6,083	5,123	4,701	91.7
Primary Schools.....	21,835	16,747	14,681	87.6
Industrial Schools....	437	267	227	85.
Colored School.....	204	163	136	83.4
Totals.....	29,767	23,363	20,727	88.7

The following table shows the increase or decrease for the year 1895, as compared with the year 1894:

Schools.	Enrollment.		Av. Enrollment.		Av. Attendance.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
Normal and Training						
Sch.—Normal Dept.	6	..	4	..	3	..
High School.....	99	..	88	..	78	..
Grammar Schools ...	179	..	67	..	48	..
Primary Schools.....	486	..	583	..	498	..
Industrial Schools....	..	22	..	23	..	21
Colored School.....	..	26	..	13	..	11
Totals.....	770	48	742	36	627	32
Net increase.....	722		706		595	

It will be noted that the increase is general and substantial in all the schools except the Industrial and Colored, and here the decrease is light. Another feature worth noting is that the increase in the average attendance is in very close proportion to the increase in the

enrollment. Nothing indicates the sound condition of the schools better than the high standard of average attendance as compared with enrollment.

Number of days in school year, 1894-1895.....	198
Number of days the schools were actually in session	191
Total number of days present, all pupils.....	4,079,992½
Total number of days absent, all pupils.....	464,493½
Average number of days present, all pupils.....	137
Average number of days absent, all pupils. ....	16
Total number of cases of tardiness.....	7,667
Average number of cases of tardiness per day for each teacher .....	.079

The foregoing statistical table contains information frequently called for by school authorities and the public. It is arranged systematically for convenience of reference.

### AGES OF PUPILS ENROLLED.

	Males.	Females.	Total.
Number between 5 and 6 years of age	684	599	1,283
“ “ 6 “ 7 “ “	1,659	1,669	3,328
“ “ 7 “ 8 “ “	1,834	1,854	3,688
“ “ 8 “ 9 “ “	1,760	1,822	3,582
“ “ 9 “ 10 “ “	1,707	1,688	3,395
“ “ 10 “ 11 “ “	1,696	1,705	3,401
“ “ 11 “ 12 “ “	1,584	1,561	3,145
“ “ 12 “ 13 “ “	1,456	1,430	2,886
“ “ 13 “ 14 “ “	1,182	1,090	2,272
“ “ 14 “ 15 “ “	671	696	1,367
“ “ 15 “ 16 “ “	356	380	736
“ “ 16 “ 17 “ “	174	202	376
“ “ 17 “ 18 “ “	90	87	177
“ “ 18 “ 19 “ “	8	67	75
“ “ 19 “ 20 “ “	....	29	29
“ over 20 “ “	....	27	27
Totals.....	14,861	14,906	29,767

It is worthy of remark that the number of male and female pupils enrolled is very nearly equal. This has been the fact for several years past. As this table includes all enrolled in all the schools, from the kindergarten classes to and including the graduates in the Normal School, it is a pretty sure proof that our boys are availing themselves of the schools to an equal extent with the girls.

#### PERCENTAGE OF AGES OF PUPILS ENROLLED.

Percentage between 5 and 6 years of age.....						.043	
"	"	6	"	7	"	"	.111
"	"	7	"	8	"	"	.123
"	"	8	"	9	"	"	.120
"	"	9	"	10	"	"	.114
"	"	10	"	11	"	"	.114
"	"	11	"	12	"	"	.105
"	"	12	"	13	"	"	.096
"	"	13	"	14	"	"	.076
"	"	14	"	15	"	"	.045
"	"	15	"	16	"	"	.024
"	"	16	"	17	"	"	.012
"	"	17	"	18	"	"	.005
"	"	18	"	19	"	"	.002
"	"	19	"	20	"	"	.0009
"	over			20	"	"	.0009

Again we note the fact that the highest percentage of enrollment in the schools is between the ages of 7 and 8. It seems hardly right that the falling out of school should begin at this early age. We find, further, that this dropping out continues to the end of the school age. Some remedy should be found for this undesirable state of things. The first step, of course, will be to ascertain the

cause. This, I have intimated heretofore a number of times, would be found in the violation of the Child Labor law, whereby these young children are put to work. Our shops, factories, stores and other places of business are full of them.

The following table shows the variation in attendance of the pupils of respective ages, for 1894 and 1895:

1894.	1895.							In-crease.	De-crease.
1,186	1,283	were between 5 and 6 years of age..						97	..
3,427	3,328	"	6	"	7	"	"	..	99
3,610	3,688	"	7	"	8	"	"	..	78
3,516	3,582	"	8	"	9	"	"	..	66
3,414	3,395	"	9	"	10	"	"	..	19
3,529	3,401	"	10	"	11	"	"	..	128
3,019	3,145	"	11	"	12	"	"	..	126
2,796	2,886	"	12	"	13	"	"	..	90
2,109	2,272	"	13	"	14	"	"	..	163
1,217	1,367	"	14	"	15	"	"	..	150
620	736	"	15	"	16	"	"	..	116
312	376	"	16	"	17	"	"	..	64
169	177	"	17	"	18	"	"	..	8
78	75	"	18	"	19	"	"	..	3
8	29	"	19	"	20	"	"	..	21
35	27	were over	20	"	"	"	"	..	8
29,045	29,767							979	257
Net increase.....								722	

## PERCENTAGE OF ENROLLMENT.

	Number Enrolled.	Percentage of Enrollment.
Number who have attended 10 months, or more, during the year.....	1,329	.044
Number who have attended 8 months, but less than 10.....	14,857	.499

	Number Enrolled.	Percentage of Enrollment.
Number who have attended 6 months, but less than 8.....	4,371	.146
Number who have attended 4 months, but less than 6.....	2,843	.095
Number who have attended less than 4 months.....	6,367	.213

The largest percentage of attendance, as shown in the foregoing table, is found between 8 months and less than 10 months, the smallest, 10 months and above. This would indicate that the longest term of attendance by the greatest number is from 8 to 10 months. This tabulated matter, when studied aright and with a purpose, gives us valuable information, and leads to conclusions of interest to those responsible for the administration of our school system.

A brief quotation from the report for 1894, touching this matter, will not be out of place here :

“The attention of the public is sharply directed to the relation between the enrollment and the average attendance in our schools ; also the comparatively few who complete the course and graduate from the schools.

While this is to be deplored, and we are endeavoring and hope to increase the number who shall complete the course and receive the full benefit of the school, yet we feel that the criticism is unfair and misleading. No attention or credit is given to the fact that while many do not finish and graduate, a goodly number have received years of good school training and have, in very many cases, left to enter business. The impression given and inference drawn are that all who do not graduate have received no benefit from the school course, and consequently the money expended in support of the schools



has been thrown away. This is a great mistake, as a moment's reflection will show, and is all wrong, as it leads to a prejudice against the value and efficiency of the public schools. It is not possible, as all experience has shown, for all who enter to complete the entire course. This is no argument against the value and efficiency of the schools. On the contrary, it shows that the system gives its opportunities to all who can use them for a longer or shorter time."

One of the greatest hindrances the cause of public education has to contend with is the hasty and unfair conclusion reached by many in relation to the kind, amount and quality of the work done in the schools. Almost every one considers himself fully competent to pass a final judgment upon the work as to what it should be, its extent, and how it should be done. No other profession or calling would be willing, or would submit, to the judgment of those who have no theoretical or practical knowledge concerning this profession or calling. It is a source of great satisfaction, however, to know that a different and better state of things is near at hand.

#### SCHOOL ATTENDANCE FOR THE LAST FIVE YEARS.

Year.	Enrollment.	Average Enrollment.	Average Attendance.	Per Cent. of Attendance.
1891.....	25,757	19,956	17 678	88.5
1892.....	26,650	20,015	17,588	87.8
1893.....	27,361	20,921	18,378	87.8
1894.....	29,045	22,657	20,132	88.8
1895.....	29,767	23,363	20,727	88.7

The value of such tables as the above is in the comparison of succeeding with preceding years. The growth,

which, in a large measure, determines the needs, is readily seen, and when the call for extended accommodations comes there is no difficulty in substantiating the claim. The steady growth of the public institutions of a city or a community should be carefully watched and studied.

## TEACHERS.

The number of day school teachers in the employ of the Board, their classification and distribution, and the increase for the year ending June, 1895, are shown in the following table:

	Males.	Females.	Total.
Normal and Training School—			
Normal Department.....	1	2	3
High School.....	11	18	29
Grammar Schools.....	17	121	138
Primary Schools. ....	7	332	339
Industrial Schools. ....	..	6	6
Colored School.....	1	3	4
Special Teachers.....	1	3	4
Totals .....	38	485	523
June, 1894.....	35	469	504
Increase ....	3	16	19

The increase in the number of teachers for 1895 is 9 less than for 1894. The new buildings and additions to several others will, without doubt, lead to a considerable increase for 1896. This growth of the system, in all directions, is a matter of great moment to the school authorities and the friends of education in our city. It requires large means to supply buildings, appliances and trained teachers. Great vigilance should be exercised by those responsible.

## TERMS OF SERVICE OF TEACHERS.

In the following table the teachers of the city are grouped according to their total experience in teaching:

Number who have been teaching 1 year or less.....	21
Number between 1 and 5 years.....	125
Number between 5 and 10 years.....	113
Number between 10 and 15 years.....	101
Number between 15 and 20 years.....	57
Number between 20 and 25 years.....	48
Number between 25 and 30 years.....	31
Number between 30 and 40 years.....	22
Number over 40 years.....	5
Longest time by any one teacher.....	47 years
Average time of experience of teachers....	11 years, 7 months

Of the total number of regular teachers reported, 523, 4 per cent. have been teaching one year or less; 23.9 per cent., more than one and less than five years; 21.6 per cent., between five and ten years; 19.3 per cent., between ten and fifteen years; 10.9 per cent., between fifteen and twenty years; 9.2 per cent., between twenty and twenty-five years, and 11.1 per cent., over twenty-five years.

The frequent reference made to the tables in the last report, presenting the terms of service of all the teachers in the employ of the Board, seems to be a sufficient reason for continuing them for convenient and ready reference.

The Superintendent would call attention to some interesting comments on these tables, pages 46 and 47 of report for 1894.

In the following table the teachers of the city are grouped according to the length of time they have taught in the schools where now employed:

Number who have taught in the present school 1 year or less.....	57
Number between 1 and 5 years.....	156
Number between 5 and 10 years.....	132
Number between 10 and 15 years.....	92
Number between 15 and 20 years.....	32
Number between 20 and 25 years.....	34
Number between 25 and 30 years.....	15
Number between 30 and 40 years.....	4
Number over 40 years.....	1
Longest time any one teacher has taught in school where now employed.....	41 years
Average time.....	8 years, 2 months

Of the 523 regular teachers reported, 10.9 per cent. have been teaching one year or less in their present school; 29.8 per cent., between one and five years; 25.3 per cent., between five and ten years; 17.6 per cent., between ten and fifteen years; 6.1 per cent., between fifteen and twenty years; 6.5 per cent., between twenty and twenty-five years, and 3.8 per cent., over twenty-five years.

#### TEACHERS' CERTIFICATES AND GRADUATION.

Number holding 1st grade state certificates....	30
“ “ 2d “ “ .....	15
“ “ 3d “ “ .....	3
“ “ 1st grade county “ .....	4
“ “ 2d “ “ .....	4
“ “ 3d “ “ .....	4
“ “ city “ .....	447
“ “ special “ .....	14
Number of Newark City Normal School graduates.....	434
“ “ N. J. State “ “ .....	23
“ “ graduates from other Normal Schools.....	9
“ “ colledge graduates.....	37

Number of day school teachers in the employ of the Board for the last five years:

	Males.	Females.	Total
1891.....	35	414	449
1892.....	36	428	464
1893.....	35	441	476
1894.....	35	469	504
1895.....	38	485	523

#### PRINCIPAL CHANGES IN THE CORPS OF TEACHERS DURING THE YEAR.

We are happy to be able to state that no deaths occurred among the teachers during the year.

Mr. J. A. Hallock was transferred from the principalship of Webster Street to the same position of Elliot Street, dating from September 1, 1895.

Mr. A. G. Balcom was appointed principal of "Franklin" School, dating from September 1, 1895.

Mr. W. S. Willis was appointed principal of Fifteenth Avenue School, to date from September 1, 1895.

Mr. William L. Heineken was appointed principal of Charlton Street School, dating from November 1, 1895.

#### CHANGES IN GRADE OF SCHOOLS.

By the action of the Board, the grade of the following schools was changed, dating from September 1, 1895:

Webster Street, from a grammar to a primary grade.

"Franklin," from a primary to a grammar grade.

Thirteenth Avenue, from a primary to a grammar grade.

#### RECITATIONS.

Average number of recitations per teacher, heard daily:

In Normal School.....	6
In High School.....	4
In Grammar Schools.....	8
In Primary Schools.....	11



## KINDERGARTEN CLASSES.

This part of our elementary course is well received and is doing its work in a very satisfactory manner. We now have three classes in good working order, fitted up with the kindergarten tables and other supplies. There are a number of first year classes that are doing the kindergarten work introductory to the full primary course. It is expected that several of these classes will be formed, for the youngest children, in several other localities at the beginning of the April term.

The purpose, as has been said many times, of this work is to train the senses, the observing powers and manual dexterity. Also the nature or disposition of the children as manifested in the social relations in their plays, games, occupations, etc. This can be done in the kindergarten exercises as nowhere else.

This question of the relation of the kindergarten and the primary school was very fully discussed in the report for 1894, pages 49-53.

## PRIMARY SCHOOLS.

These need no apology. They have demonstrated, many times, their usefulness and their necessity. We have pointed out in the tabulated statistics of the report that the great majority of pupils in our schools are found in the primary schools, and that the falling out of school, for work or for other causes, begins in this department. It is of the greatest importance that the time these children spend in school should be of such character as shall conduce to their greatest benefit. This can only be secured by equipping them in the best manner, and supplying them with the most thoroughly trained teachers. There should be no hesitancy here. The primary school is no

place for the weak and untrained teacher. I know our sympathies are often active and ready to excuse or overlook these weaknesses. But we must not forget the children who may be, and often are, robbed of their only chance in life. Time lost here is beyond recall, and no matter how excellent subsequent opportunities may be, the loss cannot be redeemed.

While uttering this caution, I wish to speak a word for the great body of competent and faithful teachers who are doing work for which society can never adequately recompense them. Their devotion and success are recognized by all.

It will be seen, by reference to the following statistical table, that the growth was steady and that the primary work in our schools is not losing ground.

The following tables show the growth in membership and the increase in the number of classes:

Number of distinct primary schools.....	29
Increase.....	1
Number of classes in same.....	174
Decrease from last year.....	2
Number of primary departments in grammar school buildings.....	18
Increase,.....	1
Number of classes in same.....	138
Increase over last year.....	6
Total number of primary classes.....	312
Increase of primary classes for the year.....	4

These classes contained in the enrollment, 21,207, an increase of 165 over last year; in the average enrollment, 16,118, an increase of 547 over last year; average per teacher on the enrollment, 68; average per teacher on the average enrollment, 52.

While there have been some small classes in some few schools, for reasons not easily removed, we notice that the enrollment per teacher, both on the enrollment and the average attendance, was large, being 68 on the enrollment and 52 on the average enrollment. On account of change in the direction of the growth of population and the encroachments of business and manufacturing enterprises, we often find the school district boundary lines somewhat out of place. While much can be done to remedy this, it cannot be wholly overcome, and we shall occasionally find it necessary to accept a class not quite up to requirements as to numbers.

School.	No. of Classes.	Average Enrollment.	Average Attendance.	Pupils Per Class.
Normal and Training—				
Training Department. ....	6	307	268	51
Burnet Street .....	8	404	367	51
State Street .....	9	419	369	47
James Street. ....	4	168	136	42
Webster Street .....	7	324	274	46
Washington Street .....	5	244	216	49
Marshall Street .....	5	225	191	45
Morton Street .....	14	732	617	52
Broome Street .....	3	153	131	51
Court Street .....	2	89	73	45
Monmouth Street .....	14	796	703	57
Lawrence Street .....	4	191	169	48
Commerce Street .....	6	237	205	39
Colored .....	3	121	100	40
Chestnut Street .....	8	416	369	52
Lafayette Street .....	10	498	424	50
Clover Street .....	2	99	91	50
South Eighth Street .....	7	368	318	53
Thirteenth Avenue. ....	13	742	641	57
Central Avenue .....	8	408	358	51

Schol.	No. of Classes.	Average Enrollment.	Average Attendance.	Pupils Per Class.
Lock Street.....	4	213	182	53
Warren Street.....	6	295	250	49
Wickliffe Street.....	4	143	117	36
Wickliffe Street Annex.....	3	159	134	53
Summer Avenue.....	8	372	336	47
Elliot Street.....	6	293	247	49
Ridge Street.....	2	103	88	51
Miller Street.....	8	403	352	50
Elizabeth Avenue.....	2	94	77	47
Oliver Street.....	6	312	275	52
South Street.....	8	418	361	52
Walnut Street.....	8	348	306	44
Ann Street.....	8	450	396	56
North Seventh Street .....	8	432	375	54
Roseville Avenue.....	6	314	277	52
South Market Street.....	7	352	303	50
Hamburg Place.....	8	483	432	60
Hawkins Street.....	6	319	270	53
South Tenth Street.....	12	657	600	55
Holland Street.....	2	90	81	45
Camden Street.....	12	631	562	53
Waverly Avenue.....	8	474	420	59
Newton Street.....	8	449	410	56
Eighteenth Avenue.....	11	619	545	52
Livingston Street.....	4	250	218	63
"Franklin".....	7	415	366	58
Bloomfield Avenue.....	2	89	79	45
Totals.....	312	16,118	14,079	52

### AVERAGE ENROLLMENT BY GRADES.

Month.	Fourth.	Third.	Second.	First.	Total.
September.....	2,898	3,615	3,971	5,647	16,131
October.....	2,927	3,602	4,145	5,860	16,534

Month.	Fourth.	Third.	Second.	First.	Total.
November.....	2,865	3,515	4,144	5,824	16,349
December.....	2,782	3,433	3,999	5,750	15,964
January.....	2,788	3,479	3,943	5,803	16,013
February.....	2,770	3,496	3,938	5,708	15,912
March.....	2,748	3,431	3,946	5,838	15,963
April.....	2,650	3,400	4,002	6,184	16,236
May.....	2,618	3,378	3,882	6,306	16,184
June.....	2,532	3,262	3,798	5,971	15,563
Averages....	2,758	3,461	3,977	5,889	16,085

Sharp attention was called last year to the matter of leaving school between the first year and the fourth year. The Superintendent has referred to this a number of times. The law bearing on child labor should be more rigidly enforced. There can be very little doubt that if this law was properly enforced many children now out of school would be in attendance.

#### AVERAGE ENROLLMENT OF PRIMARY GRADES FOR THE LAST FIVE YEARS.

Year.	Fourth.	Third.	Second.	First.	Total.
1891.....	2,426	3,065	3,369	4,775	13,635
1892.....	2,412	2,913	3,391	4,753	13,469
1893.....	2,493	3,279	3,400	5,325	14,497
1894.....	2,640	3,413	3,827	5,656	15,536
1895.....	2,758	3,461	3,977	5,889	16,085

#### GRAMMAR SCHOOLS.

The condition and progress of these schools have been presented in considerable detail for several years past, making it unnecessary to extend comment here. They hold their own, as will be evident from examination of the following tabulated tables. Under the new course of



study, we are enlarging and elevating the grade of work done in them. A good beginning in algebra was made last year. Still better work in this subject is being done this year. All the other subjects in these classes are feeling the pressure of advancement. These grades should and will very soon do well and easily all the work now done in the first year in the High School, thus leaving a full year's time for other and higher work in that institution:

Number of grammar schools, including Colored School...	18
Increase over last year.....	1
Number of classes in same.....	122
Increase over last year.....	6
Number of primary schools having grammar classes.....	10
Number of classes in same.....	22
Increase over last year.....	5
Total number of grammar classes.....	144
Increase over last year.....	11

These classes contained in the enrollment, 7,352, an increase of 452 over last year; in the average enrollment, 6,182, an increase of 267 over last year. Average per teacher on the enrollment, 51; average per teacher on the average enrollment, 43.

The above shows an increase in number of schools, number of classes and number of pupils. The average per teacher on the average enrollment is 43 throughout the city. This is above the legal requirement, and shows unmistakably a sound condition in all respects.

The following table shows at a glance the number of classes in each grammar school, average enrollment, average attendance, and the number of pupils per class. The showing is a good one for the city:

School.	No. of Classes.	Average Enrollment.	Average Attendance.	Pupils Per Class.
Burnet Street.....	8	301	289	38
State Street.....	1	44	40	44
Webster Street.....	5	205	188	41
Washington Street.....	9	340	308	37
Morton Street.....	7	305	277	44
Monmouth Street.....	2	98	89	49
Lawrence Street.....	6	253	236	42
Colored.....	1	42	36	42
Chestnut Street.....	8	313	287	39
Lafayette Street.....	6	226	200	38
South Eighth Street.....	9	350	321	39
Thirteenth Avenue.....	4	211	192	53
Central Avenue.....	6	236	212	39
Warren Street.....	2	91	82	46
Summer Avenue.....	8	365	339	46
Elliot Street.....	3	151	136	50
Miller Street.....	8	400	363	50
Oliver Street.....	8	314	294	39
South Street.....	2	76	69	38
North Seventh Street.....	4	188	172	47
South Market Street.....	5	247	224	49
Hamburg Place.....	6	279	252	47
Hawkins Street.....	1	46	43	46
South Tenth Street.....	4	167	152	42
Camden Street.....	2	76	72	38
Newton Street.....	10	439	408	44
Eighteenth Avenue.....	8	362	331	45
"Franklin".....	1	57	54	57
Totals.....	144	6,182	5,666	43

## AVERAGE ENROLLMENT BY GRADES.

Month.	Eighth.	Seventh.	Sixth.	Fifth.	Total.
September.....	987	1,376	1,923	2,408	6,694
October.....	982	1,372	1,914	2,407	6,675
November.....	952	1,317	1,859	2,367	6,495
December.....	937	1,288	1,819	2,286	6,330
January.....	920	1,264	1,802	2,299	6,285
February.....	904	1,234	1,765	2,249	6,152
March .....	897	1,215	1,718	2,197	6,027
April.....	869	1,166	1,648	2,120	5,803
May. ....	862	1,136	1,607	2,080	5,685
June.....	843	1,092	1,550	2,012	5,497
Averages.....	915	1,246	1,760	2,243	6,164

The foregoing table is one of very great convenience, showing at a glance and in a systematic manner the comparative standing, as to numbers, of all the grades in these grammar schools.

The gradual falling off in numbers from the fifth year to the eighth, inclusive, is readily seen.

AVERAGE ENROLLMENT OF GRAMMAR GRADES FOR THE  
LAST FIVE YEARS.

Year.	Eighth.	Seventh.	Sixth.	Fifth.	Total.
1891 .....	825	1,132	1,546	1,949	5,452
1892.....	839	1,085	1,484	2,125	5,533
1893.....	783	1,058	1,570	2,170	5,583
1894 .....	830	1,169	1,674	2,269	5,942
1895.....	915	1,246	1,760	2,243	6,164

We have thought it well to present in the above tabulated form the growth in these grades for the past five years, viz.: from 1891 to 1895, inclusive. In addition to the growth, the annual rate of increase is shown. In the

administration of a large and growing system of schools, this kind of information is of great importance in providing for their accommodation and administration.

The usual examinations for graduation from the grammar schools and thereby admission to the High School, occurred in the High School and Lawrence Street School buildings, June 17, 18 and 20, 1895.

The number of applicants was 855 ; girls, 484 ; boys, 371 ; an increase of 86 over last year.

The number graduated, 707 ; girls, 405 ; boys, 302 ; an increase of 21 over last year.

Of the number graduated, 211 were admitted by honorary graduation ; girls, 142 ; boys, 69 ; a decrease of 44 from last year ; and 496 by examination ; girls, 263 ; boys, 233 ; an increase of 65 over last year.

The number failed, 148 ; girls, 79 ; boys, 69 ; an increase of 65 over last year.

Of the entire number of applicants, 82.7 per cent. were admitted and 17.3 per cent. rejected.

The pupils were tested on the following questions :

These questions were prepared by the City Superintendent with great care. The one purpose in their construction was to furnish an impartial and thorough test of the practical knowledge of the pupils of the various subjects examined. Every precaution was taken to avoid giving or receiving help, or exposing the pupils to undue or unreasonable temptation.

The great importance of this examination in shaping the promotion from grammar schools to the High School makes it necessary that every guard should be thrown around this test as a part of the means of determining this promotion.

## ALGEBRA.

1. Define and illustrate the following :

A term ; a positive term ; a negative term ; similar terms ; dissimilar terms ; a monomial ; a polynomial ; a trinomial ; a binomial.

2. Interpret and read the following :  $3a(x+c)-5y(x+d)$ ,  
 $5ax(a-b)-3cy(c+d)$ .

Write the following in algebraic expressions :

Seven times the product of  $x$  times  $y$ , increased by three times the cube of  $z$ .

The product of  $a$ , used as a factor 5 times, multiplied by the sum of  $b$  and  $c$ .

3. Add  $10a^2b-12a^3bc-15b^2c^4+10$ ,  $-4a^2b+8a^3bc-10b^2c^4-4$ ,  $2a^2b+12a^3bc+5b^2c^4+2$ .

From  $15x^2y^2-15$  take  $4x^2y^2+z^2-4y^2-10$ .

4. A and B started in business, A furnishing \$4,000 more than B. Three times B's capital was then equal to A's. How much did each furnish ?

5. Multiply  $3am+6c$  by  $8ac+c^2$ . Give and apply the formulas for finding the square of the sum of two quantities, the square of the difference of two quantities, and the product of the sum and difference of two quantities.

6. A commenced business with three times as much money as B. During the year A lost  $\frac{1}{3}$  of his money and B gained \$500. The amount of A's and B's money was then equal. How much had each at first ?

7. A man has four flocks of sheep. The second is twice as large as the first, the third three times as large as the first, and the fourth as large as the first and third together. He has 200 sheep in all. How many in each flock ?

8. Divide  $4a^4-5a^2b^2$  by  $2a^2-3ab+b^2$ . Find the value of  $x$  in the following :  $5(x+1)+6(x+2)=6(x+7)$ .

9. Find the value of  $x$  in the following :

$$7x-3+2x=3x-20+1$$

$$7x-30=10+16-7x$$



Twice a certain number increased by 15 is equal to the number increased by 19. What is the number?

10. A man drove 155 miles in three days. On the second day he drove 15 miles further than on the first, and on the third day he drove 20 miles further than on the first. How many miles did he drive each day?

#### HISTORY.

1. Describe the living and working in common that characterized the early years of the Virginia Colony. Write as fully as you can about the great charter given to Virginia, and the three branches of government.

2. Describe the settlers along the New England coast; the English Puritans, and the first colony sent out by the Massachusetts Company.

3. Give a condensed account of the preparations for the war of the Revolution; the battle of Bunker Hill; the evacuation of Boston.

4. Write concerning the movement at the South for secession. Discuss the States-rights doctrine and the formation of the Confederate government.

5. Describe the conditions of the war as to the question of Union or Secession; the relation of slavery to the war, and the advantages and disadvantages on both sides.

6. Describe the Vicksburg campaign as to the military character of Gen. Grant; his failures at Vicksburg; his attempts to carry the place by storm; the final siege and surrender.

7. Describe the fall of Richmond, beginning with the movements about Petersburg. Give the surrender of Lee's army and closing scenes of the great Civil War.

8. Discuss the growth of the country in population, wealth, inventions, machines and changes in mode of life.

9. Write concerning the Legislative, Judicial and Executive departments of the government; the purpose of the Constitution and taxation.

10. Describe the lack of literature before the present century. Name at least five of the older writers. What can you say of the literature and writers since the Civil War? Of American art?

## ARITHMETIC.

1. A grass plot 40 feet long, 24 feet wide, has a walk around the outside 2 feet wide. How many square feet in the walk? How much will it cost to inclose the plot with a fence at 15 cents a yard?

2. A man bought 150 acres of land at \$87.50 per acre. He sold at one time 60 acres at \$75 per acre, and at another time 50 acres at \$95.60 per acre. What must he sell the remainder for per acre to gain \$1,155 on the cost? What was the gain per cent?

3. How many square yards of wall paper will it take to cover the walls and ceiling of a room 18 feet long, 10 feet wide and 8 feet high; allowance to be made for 3 windows, each 5 feet by 4 feet, and two doors, each 7 feet by 5 feet? What will it cost at  $4\frac{1}{2}$  cents per square yard?

4. A man built a house costing \$10,000 upon a lot costing \$500. The house was burned and he received  $66\frac{2}{3}$  per cent. of its cost from the insurance company. He then sold the land for \$875. Did he gain or lose on the entire transaction and what per cent?

5. What will it cost to dig and wall the cellar of a house whose length is  $41\frac{1}{4}$  feet, width 33 feet. The cellar to be 8 feet deep and the walls  $1\frac{1}{2}$  feet thick? The digging will cost \$0.50 a cubic yard and the stone and mason work \$3.75 a cubic yard?

6. What are the net proceeds from the sale of 3,460 barrels of sugar at \$12.50 per barrel, charges for freight and storage being 35 cents per barrel; commission for selling 3 per cent.; for guaranteeing pay  $1\frac{1}{2}$  per cent?

7. May 10, 1883, I borrowed \$8,848, with which I purchased

flour at \$6.70 a barrel. June 21, 1884, I sold the flour at \$7.62½ a barrel, cash. What did I gain by the transaction, interest being calculated at 6 per cent ?

8. There is a house 112 feet long and each of the two sides of the roof is 25 feet wide. How many shingles will it take to cover the roof if it requires 6 shingles to cover one square foot ? What will the shingles cost at \$3.50 per M ?

9. What will it cost to cover with asphalt pavement Chestnut street from Broad to Mulberry, the distance being 60 rods and the width from curb to curb 35 feet, at \$3 75 a square yard ? Also to flag with stone the sidewalks, both sides, at 20 cents a square foot, the walks each being 10 feet wide ?

10. Two persons start from the same place, one walking due north at the rate of 3 miles an hour, and the other due east at the rate of 4 miles an hour. How far apart will they be at the end of eight hours ?

#### GRAMMAR.

1, 2, 3, 4. Using not less than thirty-five lines, give an account of your school work during the year now closing. Also a full description of your proposed plans for the summer vacation.

The following points will be closely noted in judging the composition :

- (a) Quality of thought.
- (b) Clearness and force of expression.
- (c) Paragraphing, spelling, capitals and punctuation.
- (d) Neatness and arrangement.

5. Write a social letter of not less than twenty lines. The letter must be correctly arranged in all particulars.

In judging this composition work, close attention must be given to the thought and the correctness of the forms of expression. Sign John or Mary Blank. In no case will the pupil use his name or the name of the principal, teacher or scholar in the school in writing the composition and the letter.

6. Name and define the modifications of verbs. Write sentences or a paragraph illustrating the use of each of these modifications. Select one of each in your paragraph, naming the kind of modification.

7. Give illustrations either in sentences or a well written paragraph of the correct use of the following words : Except, accept, proceed, precede, principal, principle, ought, aught, of, off. Parse any three of the words you illustrate.

8. Analyze the following :

I shot an *arrow* into the air,  
It *fell* to earth, I knew not *where* ;  
For, so swiftly it flew, the sight  
    *Could not follow* it in its flight.

Parse the italicized words.

9. What is meant by inflection ? Name the parts of speech that are inflected and state for what they are inflected. Name the parts of speech that are not inflected.

10. Make selections from any three of the following authors : Irving, Hawthorne, Longfellow, Lowell, Whittier, Holmes. Name the poem or prose piece from which the selections are made. Give the thought or purpose contained in the selections you give.

#### GEOGRAPHY.

1. Describe geographical position, latitude, longitude, zones of climate and their uses in the study of geography.

2. Describe the Mississippi Valley as to location, extent, form, drainage, climate, natural advantages and its chief cities. Draw an outline map of the valley, tracing its largest rivers and locating its chief cities.

3. Describe the Middle States as to location, surface, rivers, climate, productions, pursuits and chief cities.

4. Describe the conditions of plant life and the causes that control the distribution of plants. Also, the conditions of animal life and the three principal belts of animal life.

5. Describe the important features of Asia and Africa as to their situation, extent, outline, surface, rivers, climate, productions and population.

6. Describe the British Empire as to its extent, natural wealth, manufactures, agriculture, commerce and government. Name five important cities.

7. Describe the following cities as to where located, why, growth, population, commercial importance, principal exports and imports, routes from New York: San Francisco, London, Boston, Newark and Paris.

8. Compare Europe and North America as to their situation, size, form, general surface, climate, principal countries, population and chief cities.

9. Describe New Jersey as to its location, form, size, surface, rivers, agriculture, manufactures and chief cities.

10. Draw an outline map of New Jersey: trace the Passaic, Delaware and the Hackensack rivers; also outline Staten Island and Raritan Bay. Also locate Newark, Jersey City, New Brunswick, Trenton, Atlantic City, Asbury Park and Long Branch.

#### SPELLING.

#### DICTIONARY EXERCISE.

"The pine, placed nearly always among scenes disordered and desolate, brings into them all possible elements of order and precision. Lowland trees may lean to this side and that, though it is but a meadow breeze that bends them, or a bank of cowslips from which their trunks lean aslope. But let storm and avalanche do their worst, and let the pine find only a ledge of vertical precipice to cling to, it will nevertheless grow straight."

"When the Revolution broke out there were nearly three millions of people in the American colonies. During the war the population increased, and, notwithstanding the interruption of business and the destruction of property, wealth also



increased. The loss of credit and the inefficiency and suffering of the army were principally due to the weakness of the government. There were, indeed, thirteen governments, bound together very loosely."

In addition to the above, the spelling of the words in the composition of the Grammar paper was considered as a part of the Spelling test.

## SUMMARY OF THE EXAMINATIONS.

SCHOOLS.	Applicants.		Graduated.				Failed.	
	Applicants.		Honorary Graduation.		By Examination.		Failed.	
	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.
Burnet Street...	39	22	14	5	19	13	6	4
Webster Street...	20	9	13	3	6	5	1	1
Washington Street...	35	22	5	2	24	18	6	2
Morton Street...	17	17	10	2	7	15	..	..
Lawrence Street...	30	22	8	6	15	11	7	5
Colored .....	4	1	2	..	1	1	1	..
Chestnut Street...	32	33	14	8	17	23	1	2
Lafayette Street...	18	11	4	2	8	5	6	4
South Eighth Street...	21	17	11	7	7	7	3	3
Central Avenue...	18	15	1	2	12	8	5	5
Summer Avenue ..	58	38	13	3	38	29	7	6
Miller Street...	36	37	9	5	20	21	7	11
Oliver Street...	40	15	10	2	18	9	12	4
North Seventh Street...	21	9	2	..	17	5	2	4
South Market Street...	15	27	6	8	9	16	..	3
Hamburg Place...	14	19	5	5	9	13	..	1
Newton Street...	43	32	15	9	24	20	4	3
Eighteenth Avenue...	12	13	..	..	10	10	2	3
Private .....	11	12	..	..	2	4	9	8
Totals.....	484	371	142	69	263	233	79	69
Totals.....	855	211	496	148				

Average age of girls graduated, 14 yrs., 7 mo.

" " boys 14 " 7 "

General average 14 " 7 "

Average age of girls failed, 14 yrs., 11 mo.

" " boys 15 " 1 "

General average 15 " 1 "

## SCHOOLS:

## HONORARY GRADUATIONS AND PROMOTIONS, JUNE, 1895—Continued.

SCHOOLS.	Grades.								Total.
	8	7	6	5	4	3	2	1	
Summer Avenue.....	16	9	3	7	2	22	23	26	108
Elliot Street.....	..	7	12	10	12	9	14	30	94
Ridge Street.....	..	..	..	..	3	1	10	9	23
Miller Street.....	14	6	5	9	2	14	10	11	71
Elizabeth Avenue.....	..	..	..	..	3	3	7	3	16
Oliver Street.....	12	15	9	9	3	4	11	7	70
South Street.....	..	..	1	3	2	1	15	14	36
Walnut Street.....	..	..	..	..	24	21	33	29	107
Ann Street.....	..	..	..	..	10	2	..	12	24
North Seventh Street.....	2	5	..	3	6	11	12	6	45
Roseville Avenue.....	..	..	..	..	2	8	11	6	27
South Market Street.....	14	14	8	9	12	5	1	1	64
Hamburg Place.....	10	6	8	4	16	21	32	24	121
Hawkins Street.....	..	..	..	9	7	4	4	4	28
South Tenth Street.....	..	..	14	3	15	18	25	9	84
Holland Street.....	..	..	..	..	..	..	..	15	15
Camden Street.....	..	..	..	2	1	3	4	..	10
Waverly Avenue.....	..	..	..	..	19	17	12	..	59
Newton Street.....	24	12	19	20	25	17	13	31	161
Eighteenth Avenue.....	..	4	2	10	5	20	41	9	91
Livingston Street.....	..	..	..	..	..	..	..	18	18
"Franklin".....	..	..	..	3	2	1	5	12	23
Bloomfield Avenue.....	..	..	..	..	..	4	3	4	11
Totals.....	211	163	181	190	356	381	568	547	2,597

## SUMMARY AND COMPARISON OF 1894 AND 1895.

Number of honorary pupils, 1894 .....	2,645
"    "    "    "    1895 .....	2,597

Decrease.....	48
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Grade.	1895.	1894.	Increase.	Decrease.
8th.....	211	255	..	44
7th.....	163	160	3	..
6th.....	181	181	..	..
5th.....	190	276	..	86
4th.....	356	332	24	..
3d .....	381	382	..	1
2d.....	568	500	68	..
1st.....	547	559	..	12
Totals.....	2,597	2,645	95	143

## NUMBER OF HONORARY PUPILS FOR THE LAST FIVE YEARS.

Year.	Grammar Department.	Primary Department.	Total.
1891.....	1,439	2,335	3,774
1892.....	997	1,805	2,802
1893.....	878	1,706	2,584
1894.....	872	1,773	2,645
1895.....	745	1,852	2,597

## HIGH SCHOOL.

Just now this institution occupies a larger place in the public attention than perhaps ever before in its history. Its crowded condition, its imperfect and wholly inadequate accommodations, its important relation to the entire public school system, its strong hold upon the confidence and support of the community, have appealed to the good sense and sound judgment of all friends of



education. The influence of this has removed not only all doubt and hesitancy, but it has also awakened public interest and concentrated the activities of the Board of Education and the Common Council upon an efficient line of action, which gives good assurance that we shall soon rejoice in the possession of an ample and creditable High School building.

For years the character and influence of this school upon our city, educationally, commercially, professionally, industrially and for general culture, have been presented to the Board and the public, so fully and so many times, that it is entirely unnecessary to repeat here.

The Superintendent desires to note briefly the action already taken, and some of the necessary conditions that should be considered in carrying out this important measure.

This High School question was quite fully, and with some considerable detail, discussed by the Superintendent in the report for 1894. He refers to that for these details. (See page 110.)

At the meeting of the Board of Aldermen, held October 19, 1894, Alderman Ogden moved that the necessary steps be taken to authorize the Common Council to bond the city in order to raise a sufficient sum of money to erect a suitable High School building for Newark. This motion was unanimously adopted and the necessary steps were promptly taken.

At the meeting of the Board of Education, held May 31, 1895, the Committee on Normal and Training and High Schools presented the following resolution:

*Resolved*, That the buildings devoted to High School purposes are improperly located, unsuitable and entirely inade-

quate to meet the pressing needs of said school, and in accordance with the act passed by the Senate and General Assembly, providing for the purchase of lands and the construction and repair of buildings for High School purposes, the Board of Education hereby requests the Common Council to appropriate such sum or sums of money as may be deemed necessary for the purchase of lands and the erection thereon of a suitable building, which shall be a credit to the city.

This resolution received the emphatic approval of the Board.

At the November meeting, 1895, the Committee on School Houses presented the following resolution:

*Resolved*, That the Board of Education having performed its present entire duty under Chapter VI, of the laws of 1895, in certifying to the Common Council the necessity of a new High School building, that the Common Council be again requested to provide for an appropriation of a sufficient sum of money, not to exceed three hundred thousand (\$300,000) dollars, to the end that this Board, through its proper committees, may, at once, proceed to select a suitable site to be submitted to them for their concurrence.

Through these resolutions the whole matter touching the selection of a site and the erection of a High School building was placed in process of realization. The Board and the Building Committee are moving with commendable promptness and intelligence.

The first and, in my judgment, the most important thing to be settled is the site, for the proper location, in all respects, of this High School building. No mistake should be made here. There are many considerations that should be weighed, and well weighed, before this site is settled upon. Different individuals and differ-

ent classes of people have many and different reasons, that move them in the selection of a locality for a building like this. Some are moved almost entirely by the idea of centrality. They reason this way. This school is for the city at large, and no locality should receive favor or consideration over any other locality. Their premises and their reasoning bring them to the conclusion that the location must be geographically central. While there is truth and force in what they say, centrality is only one element, among many, that should be considered.

Others look at this question from the architectural or monumental standpoint. The city has none or, at least, very few public buildings; this is to be a large and costly structure and should, for that reason only, be placed in a locality that will best exhibit these features, forgetting that art and architectural structures and educational forces create their own centers.

Another reason is given, that some think, should largely influence the location of this building, viz.: It is a public building and should be grouped with the other like structures of the city, in some prominent, central part.

Another and very important consideration is accessibility. How can the school be reached most expeditiously or in the least time, with the least inconvenience and cost to the pupils? This consideration should never be overlooked. I would note this word of comment just here. All important localities and institutions soon become accessible by reason of their importance and influence. A community will not find it difficult for any length of time to reach, anywhere in its midst, that which it honors and values.

In settling this question perhaps no more important

element can be recognized than the direction, growth and distribution of the population ; this is especially true in the locating of school buildings. I know that there are many considerations and influences that operate in determining the site of such an institution as this one under discussion ; the commercial and financial interest of those who have, or think they have, desirable plots for such use ; the effect upon the adjoining neighborhood ; the effect of the vicinity upon the institution itself ; the possible or probable hindrances, inconveniences or nuisances that may spring up in the near vicinity to the great detriment of the school, practically nullifying the purpose for which it was erected. These are matters of vital importance, and should have their full weight. In large commercial and manufacturing cities these disturbing and hindering forces are specially potent.

The purpose of the school is to educate the community who organizes and supports it. Anything that interferes with this should be avoided or removed. In locating the school building, freedom from the noise and disturbance of the busy, active thoroughfare, is a matter of great importance as regards the peace and full usefulness of the school. In many of our large cities, schools are frequently practically destroyed in consequence of the roar and constant rattle of the street traffic that must necessarily take place on central and, almost surely, overcrowded thoroughfares. The plain, sensible remedy is, keep off and at a safe distance from these busy, noisy centers. To do this may and almost certainly will require a deviation from the geographical center, or even the center of population for the time being.

The somewhat extensive park system contemplated and outlined for Newark will have a great influence in

determining the trend and distribution of the population. This should receive full consideration by the Board in the location of the public High School for our city. If the best future and permanent interest of this institution and the system of public schools require that the idea of mere centrality, or public prominence or present accessibility, should be subordinated to the real interest, as shown in the probable future development and progress of the city, then it should be done, no matter what adverse criticism may be offered.

I desire to repeat what was said on page 81, report of 1894 :

“I beg to offer a few suggestions regarding the kind of building, as to the extent and plan, needed to meet the present and future demands of Newark.

“The building should accommodate easily and well, from 1,200 to 1,500 pupils. This will require from 35 to 40 class rooms. These rooms should be not less than 28 by 32 feet in size, and 14 feet high. They should be so lighted that all the pupils will receive the light from the left or the left and the rear, but in no case should pupils face the light. The ventilation should be such as will insure an ample supply of pure air of proper temperature without exposing anyone to dangerous drafts.

“The furniture should be single desks and adjustable. The adjustment of the desks and seats to the size of the pupils is, from the physical standpoint, of the greatest moment. I am quite sure that we are not aware of the extent of the injury that may and does arise from the use of desks and seats not suited in size and construction to the occupant. I think that all our class rooms should, as soon as practicable, be furnished with single adjustable furniture.



“The building should contain an assembly room ample enough to seat the entire school; also to accommodate the Commencement exercises and other public occasions. There should be a well equipped gymnasium of such size and so planned and arranged that the physical training of all the pupils can be well done.

“The laboratory facilities should be of such character as to size and equipment, that the classes in physics, chemistry and the natural sciences can be thoroughly instructed in accordance with correct principles and methods.

“Library and reading room facilities should be sufficient and of such character, in regard to accessibility and arrangement, that they may render the greatest possible aid in the reference, investigation, research and literary work of the pupils.

“The true and refined social side of the school life of our sons and daughters should not be overlooked. A reception and social room should be a part of the High School equipment.

“The yards, courts and all the appurtenances thereto should be ample and well adapted to the purposes intended.”

The danger that always threatens the erection of such buildings is insufficient ground. Almost without fail before the structure is completed the discovery is made that the lot is too small. This is a serious matter, as we all know from much experience. When this happens to a school building it becomes a calamity. The school authorities should have complete control of all sides of its school buildings. This is an absolute necessity, especially in a building such as this should and doubtless will be. Light, ventilation, surroundings, proper approaches and

the prevention of numerous petty nuisances, which are serious and troublesome, because of their proximity, can be controlled only by having plenty of ground room.

The premises should cover an entire block, the house occupying the central portion. All can see that this places these essential matters, named above, under the full control of the Board, providing, of course, that the location is in a suitable neighborhood. I feel confident that the Board, through its Building Committee, will make no mistake here.

The following table exhibits the number of pupils enrolled in each grade of the High School during the past year:

Grade.	Males.	Females.	Total.
Senior.....	23	51	74
Junior.....	47	71	118
Second Year.....	155	154	309
First Year.....	285	343	628
Total.....	510	619	1,129

The following table shows the number of graduates for each year since 1862, thirty-four years:

Year.	Males.	Females.	Total.
1862.....	8	..	8
1863.....	8	22	30
1864.....	6	8	14
1865.....	6	13	19
1866.....	8	16	24
1867.....	4	23	27
1868.....	4	25	29
1869.....	6	30	36
1870.....	7	34	41
1871.....	9	19	28
1872.....	10	30	40

Year.	Males.	Females.	Total.
1873.....	13	26	39
1874.....	14	18	32
1875.. ..	14	33	47
1876 .....	17	46	63
1877.....	19	41	60
1878.....	32	47	79
1879.....	24	48	72
1880.....	26	39	65
1881.....	24	46	70
1882.....	21	53	74
1883.....	27	48	75
1884.....	30	40	70
1885.....	39	43	82
1886.....	42	53	95
1887.....	32	45	77
1888.....	27	63	90
1889.....	37	61	98
1890.. ..	51	49	100
1891.....	37	67	104
1892.....	43	48	91
1893.....	38	61	99
1894.....	54	50	104
1895.....	57	46	103

Total No. of graduates. 794      1,291      2,085

An average of sixty each year.

The graduates for this year were distributed as follows :

Scientific Course.....	6
English Course.....	13
Classical Course.....	4
Commercial Course.....	34
Ladies' Regular Course.....	37
Ladies' Classical Course.....	9
Total.....	103

Of the entire number of graduates, 69 were of the four years' course and 34 of the two years' course.

#### HIGH SCHOOL STATISTICS FOR THE LAST FIVE YEARS.

Year.	Enrollment.		Total.	Classes.	Teachers.	Graduates.		Total.
	Males.	Females.				4 Years' Course.	2 Years' Course.	
1891..	369	551	920	23	24	74	30	104
1892..	373	607	980	24	25	66	25	91
1893..	398	587	985	23	25	76	23	99
1894..	434	596	1030	24	26	76	28	104
1895..	510	619	1129	27	29	69	34	103

There has been, for a number of years past, considerable discussion concerning the propriety of abandoning the public commencement exercises of the High School. Much has been said for and against the custom. The chief reason given by those opposed, is the cost to the parents and pupils and the Board in making the necessary personal and public preparation and arrangements. Another reason given is, it requires a great amount of time on the part of the class and the school, that could be better used for other purposes. It is true the occasion costs some money, labor and time. It is true also that it demands of the pupil time and preparation. It is further true that everything worth having costs something. And it is again true that there can be no objection to the cost of money, time and labor if an adequate return is received.

We must bear in mind that this is a public occasion, commemorating an important epoch in a public institution. The public have a right to witness and to come in close contact with, some at least, of the exercises and results of the institutions it establishes and supports.

This is an occasion towards which even pupils in the primary and grammar schools look with hope and pride. It is well known that the commencement exercises of the High School are of great interest to the friends of our public schools throughout the city. The stimulating influences of these exercises are deeply felt by the schools of the city, and thereby this great institution is kept in the memory and near the hearts of the citizens of Newark.

I feel sure that the interests of education, as found in the public sentiment of the community in favor of public education, as manifested in the pride and enthusiasm of the large number of citizens who attend from year to year these commencements, will many times compensate for the outlay of time, money and labor.

## COMMENCEMENT EXERCISES OF THE HIGH SCHOOL.

They were held in Jacobs' Theatre on Friday evening, June 14, 1895. A large audience was present and expressed gratification with the exercises.

### ORDER OF EXERCISES.

OVERTURE—"Semiramis," - - - - - *Rossini*

ENTRANCE OF GRADUATING CLASS AT EIGHT O'CLOCK.

MARCH—Dedicated to the Class of '95, - - - *Voss*

ORATION—"The Perils of a Crown,"

CLIFFORD E. ADDIS.

ESSAY—"The Mantle of Elijah,"

MISS PHŒBE J. ROWDEN.



CHORUS—"Spring Song Waltz," - - - - *Nentwich*

ACCOMPANIED BY MISS J. ETHEL RIKER.

ESSAY—"Die Mutter und Jungfrau in Goethe's Hermann und Dorothea,"

MISS ANNIE M. BROWN.

MUSIC—"The Nightingale and the Frogs," - *Eilenberg*

ESSAY—"Apropos of the New Parks,"

MISS EVA M. CAMPBELL.

ORATION—"Liberality in Views,"

PHILIP MENDEL.

CHORUS—"Approach of Spring," - - - - *Gade*

ACCOMPANIED BY MISSES RIKER AND HOLMES.

ORATION—"Der Wahre Reichtum,"

EDWARD F. MAGUIRE.

ESSAY—"Liberty in English Song,"

MISS JESSIE DONALD.

SOLO—"Friends," - - - - - *Lohr*

MISS LILLIAN B. OSBORNE,

Accompanied by Messrs. Von Gehren and Loehnberg.

ESSAY—"Aeneas and Arthur,"

MISS GRACE ALLEN FRAZEE.

CHORUS—"Jack and Jill," - - - - *Caldicott*

ORATION—"The Power of Example,"

THOMAS K. MCCLELLAND, JR.

MUSIC—"Rob Roy," - - - - *R. de Koven*

PRESENTATION OF CLASS FOR GRADUATION, BY E. O. HOVEY,  
PRINCIPAL OF THE HIGH SCHOOL.

AWARDING OF DIPLOMAS, BY HENRY J. ANDERSON, PRESIDENT  
OF THE BOARD OF EDUCATION.

## GRADUATES OF 1895.

## SENIOR BOYS.

Clifford E. Addis,	Richard Krementz,
Walter L. Coursen,	Fred. M. Kreiner,
Jacob W. Crane,	Milton Lehlbach,
Horace S. Cory,	August C. Loehnberg,
A. Clifford Cook,	Harry L. Marker,
Homer J. Diefendorf,	Philip Mendel,
Paul F. Girtanner,	Thomas K. McClelland, Jr.,
Fred. G. von Gehren,	Edwin H. Murdoch,
W. E. Helmstædter,	Ferdinand Pinner,
W. L. R. Haines,	John Rutan,
Elmer Irving,	Claud E. Scattergood,
	William Talbot.

## SENIOR GIRLS.

L. Louise Beach,	Josephine Gibian,
Ella E. Beers,	Emma Greene,
Grace B. Bergfels,	Alice M. Holmes,
Jessie L. Biddinger,	Mabel Hopler,
Annie M. Brown,	Flora F. Joralemon,
Elizabeth J. Brown,	Olive Kenny,
Mary K. Brown,	Emma A. Kingston,
Carrie M. Brown,	Anna Lehlbach,
Ella B. Carter,	Martha W. Levy,
Eva M. Campbell,	Sarah Meyer,
Josephine Campbell,	Lillian B. Osborne,
Elizabeth W. Clearman,	Louise C. Overgne,
Maud W. Combs,	Elizabeth E. Pfister,
Grace A. Dewolf,	N. Gertrude Reeves,
Mary I. Dickerson,	J. Ethel Riker,
Jessie Donald,	Bertha M. Romer,
Flora M. Donsbach,	Phœbe J. Rowden,
A. Adele Doremus,	Margaret L. Rusling,

Emma Drummond,  
 Agnes C. Finn,  
 Grace A. Frazee,  
 Anna E. Fussell,  
 Dorris Geppert,

Sarah E. Smith,  
 Susan Van Steenberg,  
 Mary L. Vincent,  
 Adeline Weil,  
 Emma L. Wenzel.

COMMERCIAL COURSE.

John J. Adams, Jr.,  
 Frank Beitel,  
 Arlington Bensel,  
 Albert Brendler,  
 Ferdinand Bucksbaum,  
 Fred. Campbell,  
 Jesse L. Conger,  
 Thomas J. Gallagher,  
 Charles A. Heim,  
 William Hilser,  
 Joseph Horter,  
 Watson W. Ingersoll,  
 Fred. Keppler,  
 Alfred H. Krick,  
 George Macomber,  
 Edward F. Maguire,  
 Frank Martine,

Thomas McMahon,  
 Edward Merkel,  
 Edward I. Miller,  
 Amos Morse,  
 Michael J. Quigley,  
 George Reed,  
 Oscar Rundzieher,  
 John S. Schwinn,  
 Ernest Searing,  
 Max Skou,  
 Matthew J. Smith,  
 George W. Snedeker,  
 Albert J. Toering,  
 Fred. L. Tompkins,  
 Frederick B. Vreeland,  
 Walter H. Walker,  
 Harry Wild.

TABLE SHOWING THE NUMBER THAT ENTERED AND THE NUMBER THAT FAILED TO ENTER THE HIGH SCHOOL OF THE GRAMMAR SCHOOL GRADUATES, IN 1894 AND 1895.

SCHOOLS.	Number Graduated.				Number that Entered the High School.				Number that Failed to Enter the High School.				Per cent. that entered High School of Gram. Scho'l graduates, 1894 & 1895.	
	1894.		1895.		1894.		1895.		1894.		1895.			
	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.		
	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.		
Burnet Street.....	34	26	33	18	26	18	29	17	8	8	4	1	82	79
Webster Street.....	14	18	19	8	8	9	13	7	6	9	6	1	64	61
Washington Street.....	24	10	29	20	15	10	17	13	9	..	12	7	60	77
Morton Street.....	21	20	17	17	15	17	11	8	6	3	6	9	68	67
Lawrence Street.....	15	17	23	17	12	15	9	12	3	2	14	5	55	79
Colored.....	1	2	3	1	1	2	1	1	..	..	2	..	50	100
Chestnut Street.....	38	19	31	31	32	19	22	22	6	..	9	9	78	82
Lafayette Street.....	13	13	12	7	8	10	6	6	5	3	6	1	56	80
South Eighth Street.....	25	24	18	14	19	19	18	10	6	5	..	4	86	76
Central Avenue.....	20	9	13	10	11	3	7	7	9	6	6	3	54	52
Summer Avenue.....	32	42	51	32	24	30	44	29	8	12	7	3	82	79
Miller Street.....	32	23	29	26	27	16	29	22	5	7	..	4	92	77
Oliver Street.....	27	20	28	11	20	17	19	7	7	3	9	4	71	77
North Seventh Street.....	..	..	19	5	..	..	14	4	..	..	5	1	73	80
South Market Street.....	9	11	15	24	9	8	11	20	..	3	4	4	82	80
Hamburg Place.....	16	13	14	18	8	9	9	8	8	4	5	10	56	55
Newton Street.....	33	28	39	29	24	20	22	15	9	8	17	14	64	62
Eighteenth Avenue.....	12	11	10	10	7	11	6	4	5	..	4	6	59	71
Totals.....	366 672	306 701	403 701	298	266 499	233 499	287 499	212	100 173	73 202	116 202	86	72 74 73	

## THE NORMAL AND TRAINING SCHOOL.

This essential department of our system, notwithstanding its wholly inadequate accommodations and facilities for doing its teaching and training work, and extending its influence as an educational power, is making steady and permanent progress in the way of improvement.

The Normal School question has been fully and many times discussed. We will take no time for that now. When the new High School shall become an accomplished fact, we shall be able to consider, with pretty certain success, the enlargement and improvement in all directions of our Normal School.

In my judgment there should be an increase in the number of Normal Schools in the state of New Jersey. We cannot, in any satisfactory degree, supply the schools of the state with professionally trained teachers with our present Normal resources. We should have at least three of these institutions in the state—one in the southern part of the state, another in the northern to co-operate with our excellent Central Normal School at Trenton. I trust the State Board of Education and the legislature will give this matter early and effectual attention. Of course Newark is an excellent locality for the northern section of the state.

The work in our city school during the past year has been a decided improvement over former years, and the promise for the future is encouraging. The professional character and spirit of the work are among the most noticeable features. There is a feeling of interest and pride manifested by all connected with the institution that is commendable.

The observation and practice department is becoming,



from year to year, strong in principles and methods and very helpful to the pupil teachers. This is shown in a marked degree in the ready and efficient work done by the graduates, almost from the very beginning of their class work. The methods of presenting, teaching and illustrating the various subjects in the school course are good proof of the value of the training.

The following exhibits the enrollment, attendance and the number of graduates since the organization of the school:

	Average Enrollment.	Average Attendance.	Graduates.
1880.....	33	29	29
1881.....	28	25	27
1882.....	31	26	28
1883.....	37	34	36
1884.....	39	32	35
1885.....	36	32	35
1886.....	41	34	36
1887.....	55	49	53
1888.....	33	31	33
1889.....	43	40	..
1890.....	79	72	40
1891.....	81	72	43
1892.....	90	82	38
1893.....	84	76	45
1894.....	72	69	30
1895.....	76	72	41
	—	—	—
Averages.....	54	48	34
Total number of graduates.....			549

The class day exercises were held in the Normal School building, on Wednesday afternoon, June 26,

1895, before the immediate friends of the graduates and the officers and members of the Board. They were much appreciated by those in attendance.

# PROGRAM.

CLASS SONG—"A May Day Dance," - *Ethelbert Nevin*

Words by ELIZABETH WARD HARVEY,

Accompanied by JENNIE M. DOWIE, S. LOUISE CLARK.

SALUTATORY—

ADA G. ABBEY.

HONOR THESIS—"Relation of the Normal School to Education,"

SARAH C. MOORE.

CHORUS—"The Son of God Goes Forth to War," *S. B. Whitney*

CLASS.

CLASS POEM—

ALICE B. VAN ARNAM.

VOCAL SOLO—"Because I Love You Dear," - *C. B. Hawley*

GENEVIEVE A. CASHION.

CLASS HISTORY—

EMILIE WANGNER.

PRESENTATION OF APPROPRIATE GIFTS TO THE CLASS—

GRACE DRUMMOND, FRANCES G. FISHER, FLORENCE RYERSON,

ADA G. ABBEY.

CHORUS—"Twilight," - - - - *Franz Abt*

CLASS.

CLASS PROPHECY—

FRANCES G. FISHER.

TRIO—"The Daffodils," - - - - *King Hall*

S. LOUISE CLARK, CLARA MABEL DILL, FLORENCE RYERSON.

## THE LAST WILL AND TESTAMENT OF CLASS OF '95—

HELENA MC CLELLAND.

## VALEDICTORY—"Parting is a Sweet Sorrow,"

MILLICENT SCHWAB.

## PRESENTATION OF CLASS—

PRINCIPAL JOSEPH CLARK.

AWARDING OF DIPLOMAS, HENRY J. ANDERSON, PRESIDENT  
OF THE BOARD OF EDUCATION.

## GRADUATES FOR 1895.

Ada G. Abbey,	E. Elise Geissele,
Grace Isobel Ames,	Elizabeth Ward Harvey,
Mary R. W. Baker,	Pauline C. Johnson,
Katharine V. Ball,	Helena McClelland,
Annie Barth,	Louise G. McVey,
Emma R. Beach,	Virginia L. McWhood,
Genevieve A. Cashion,	Sarah C. Moore,
Mabel Chandler,	Mary E. Richards,
S. Louise Clark,	Christiana Roalefs,
Clara Mabel Dill,	Sadie G. Russell,
Florence M. Dougherty,	Florence Ryerson,
Jennie M. Dowie,	Millicent Schwab,
Grace Drummond,	Florence R. Thowless,
Lois F. Elston,	Elizabeth M. Townley,
Ida B. Edwards,	Addie L. Utter,
Frances G. Fisher,	Alice B. Van Arnam,
Kittie B. Fisher,	Harriet E. Van Nest,
L. Edna Freeman,	Emilie Wangner,
Lillian Ganong,	Minnie W. Williams,
Emma Gauch,	Josephine Wyckoff,
	Ella W. Young.

## SUMMER SCHOOLS.

Newark still practically stands alone in maintaining this class and grade of schools which are held during the long summer vacation, when it is thought by some to be a great crime to attend school anywhere. These schools have been in successful operation for ten years. They are more popular and successful to-day than when first organized. They need no defence; they have found their own place and demonstrated their own usefulness.

The past year has been among, as to discipline, management and instruction, the most successful in their history.

I am frequently asked, are the children willing to attend and are teachers ready to teach during the summer vacation? I can answer, we have no trouble in these respects. The children love to attend and the teachers are willing and glad to teach. I can say without any hesitation that all the teachers and pupils are cheerful, contented and interested.

Schools,	No. of Classes,	No. of Pupils Enrolled.			Average Attendance.
		Males,	Females,	Total.	
James Street.....	2	58	56	114	63
Webster Street. ....	3	84	88	172	109
Morton Street.....	15	377	364	741	483
Wickliffe Street.....	4	142	106	248	138
Hamburg Place.....	7	169	228	397	272
South Tenth Street....	7	219	160	379	241
Newton Street.....	9	273	251	524	336
Eighteenth Avenue....	10	282	231	513	358
Totals.....	57	1,604	1,484	3,088	2,000

It will be seen by the above figures that more boys enter the schools than girls. This is an improvement for the

street. The influence of these schools upon the characters and habits of this large body of children who cannot leave the city, is worth many times more than they cost. This is a fact that the School Board can well consider.

The following exhibits the various ages of the children attending :

Schools.	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16
James Street....	28	29	18	16	11	9	3	..	..
Webster Street.....	23	20	36	29	32	20	11	..	1
Morton Street.....	205	136	124	139	82	35	12	7	1
Wickliffe Street.....	8	42	54	53	42	24	19	2	4
Hamburg Place.....	83	72	72	74	48	33	13	2	..
South Tenth Street..	93	72	70	54	39	39	9	2	1
Newton Street.....	122	105	88	90	50	45	16	6	2
Eighteenth Avenue..	117	101	91	75	62	42	21	4	..
Totals.....	679	577	553	530	366	247	104	23	9

The following shows what schools the pupils attended before entering the summer schools:

	Public School.	Private School.	No School.
James Street.....	95	10	9
Webster Street.....	131	40	1
Morton Street.....	660	63	18
Wickliffe Street....	146	94	8
Hamburg Place.....	288	101	8
South Tenth Street....	337	29	13
Newton Street.....	467	36	21
Eighteenth Avenue....	488	25	..
Totals.....	2,612	398	78



## STATISTICS OF THE SUMMER SCHOOLS FOR THE LAST FIVE YEARS.

Year.	No of Classes.	Enrollment.	Average Attendance.
1891.....	43	2,481	1,479
1892.....	46	2,720	1,607
1893.....	45	2,702	1,617
1894.....	51	2,853	1,756
1895.....	57	3,088	2,000

The above figures show that the growth and progress is steady from year to year. If there were not a living principle in them this would not be so. They would, like all institutions without use and vitality, die.

## EVENING SCHOOLS.

These schools probably receive more criticism than any other department of our system. The main reason for this is the deficient and imperfect knowledge of the evening school problem on the part of those who criticise most. I must not be understood as assuming or stating that this part of our system of public instruction is without fault, and, therefore, above censure of any kind. Far from this. On the contrary, it is sadly in need of improvement. No one knows that better than the Superintendent. He has studied the evening schools from the standpoint of an educational factor in our city. They are part of a comprehensive plan to bring the advantages of education within fair reach of the great body of wage earners, the industrial classes, who for various reasons are deprived of the opportunities afforded by the day schools. They must earn a living or help support the families of which they are members, and if it were not for the evening school they would be cut off

from all opportunity of improving their education. Their duties, as laboring people, make it impossible for them to attend, during all parts of the evening school term, with the same regularity and preparation for work when there, as is done in our day schools, with which they are constantly compared, and the resulting contrast forming the basis upon which they are criticised. I do not present these statements as an advocate in order to justify or cover up their faults and weaknesses. I wish to do them and the system justice. We, who judge them, should know what they can and what they cannot do.

Another difficulty that should be considered in relation to this evening school work is the short time of the sessions, only one hour and forty-five minutes per evening, and out of this must come many interruptions, consuming time, that cannot be wholly avoided in schools containing a number of classes, sometimes as many as thirteen or fourteen. This, you see, reduces the actual time for instruction and individual teaching to a comparatively small amount, and of course does and must count in the final results.

Another cause that has many times been noted and condemned is the employment of inexperienced teachers who seek these places, not to render competent and acceptable service, but to earn money. This, without doubt, has been the most serious hindrance with which these schools have had to contend.

The important change made in the management of these schools at the beginning of the administration of the present Board, in placing the entire control and supervision of them in the Evening School Committee, promises improvement in this matter. The first action of the Committee was to pass a resolution that none but

those who had had successful experience in teaching and whose qualifications as to scholarship and methods of teaching were accepted by the Superintendent.

Under this resolution the corps of teachers for this present term were nominated. The requirements of the resolution were insisted upon in all appointments. I feel able to say that in the very great majority of classes we are receiving the best service we have ever had in our evening schools. Do not understand that this is intended to apply to every class. I mean to say we have had a larger proportional number of successful teachers than heretofore in these schools. The discipline has been better. The useless and disturbing material that had floated into the class was soon out of the way or settled down to profitable work.

But how can these schools be improved? They are accepted as a permanent part of the educational system of Newark, and the policy and effort of the Board should be to make them as efficient as possible.

Of course the first necessity is the thoroughly qualified teacher; without this, everything else fails. When this requirement is fully recognized and complied with, the greatest obstacle in the way will be removed.

Next comes a good strong organization, well and efficiently administered by the Superintendent and the principal. Also under this organization a systematic classification of the school which will enable each teacher to do successful and classified work.

I wish to note here that since the opening of the present year, last October, a good effort has been made by the principals and teachers to classify, individualize and concentrate the work in the direction of greater profit to the pupil.

New points of interest have been introduced; new methods of arousing the personal effort of the pupil and bringing him to realize, more than heretofore, the opportunities he now enjoys, thus stimulating him to the full and practical use of the means at hand.

In one of the largest schools a system of certificates, each covering a definite portion of the course of study, has been devised by the principal and his teachers and approved by the Superintendent. These certificates are awakening new interest throughout the entire school, which has sustained its number, under this influence, to an unusual degree. I cite this instance to show what can be done when the right kind of effort is put forth. In other schools new topics, ways and means have been introduced and used with much promise.

The practice of using the special qualifications of teachers in different classes, or, in other words, the departmental system in a limited way, has been encouraged with good results. The idea of the Superintendent is that a steady, unfolding and development of the course of work, as to comprehensiveness and special application, is the best and safest way of improving these schools.

I would recommend that provision be made for a course of lectures on subjects of practical interest to the upper grade classes. These lectures can be given at small cost. They should cover such subjects as are specially useful to the laboring man, the citizen, the mechanic, the business man, etc. These can be so arranged that they can be given in the different schools at different times by the same lecturer. I feel sure that great interest can be aroused in our evening school work, and much good done by this course. I know of no other means that will be so certain to increase and sustain the attendance.

I have another suggestion I wish to make and recommend for consideration. It is to extend the evening school term to April 1, or one month, and hold sessions only four evenings per week. I hear complaint of the strain upon the pupils who attend five evenings per week and work all day from five and a half to six days every week. They say that all chance for social life is taken away. Many of our best teachers refuse to enter these classes, or, after a trial, leave them on account of the long and continuous strain. We are, they say, deprived of all opportunity of attending lectures, concerts and other forms of social life. If, they continue, we could have one evening during the week, much of this deprivation and strain would be removed. I consider the matter of sufficient importance to command the careful consideration of the Board.

I will mention and recommend for consideration by the Evening School Committee and the Superintendent, a plan that is in use in several cities designed to secure a more regular attendance. It may be denominated the "deposit plan." The pupil, when he registers, deposits one dollar as a promise and assurance that he will attend regularly. If his attendance is satisfactory the dollar is returned at the close of the term; if not, he forfeits the money.

The value of skill in sewing in the family is recognized generally. Many girls grow up without any knowledge or skill in this most useful art. In many schools, sewing is taught regularly. For girls it is an excellent exercise in manual training.

After the most careful consideration I am convinced this art can be successfully taught, at a very small cost, in connection with the evening schools.



I would recommend that provision be made for the organization of such classes among the girls, to be taught one evening per week. By this arrangement one teacher can take care of several schools.

The following tables present the condition of the schools, exclusive of the Evening Drawing School, as to registry, attendance, etc.:

The number of pupils registered, 3,153; males, 2,293; females, 860. A decrease of 522 from last year.

Number of teachers employed, 77; males, 38; females, 39. A decrease of 7 from last year.

The following table shows the enrollment, attendance, etc., for the term ending March 1, 1895:

School.	Enrollment.	Average Enrollment.	Average Attendance.	Per Cent. of Attendance.	No. of Classes.
Evening High.....	298	189	141	74.6	20
Webster Street.....	469	302	206	68.2	9
Morton Street.....	593	380	280	73.6	11
Lafayette Street.....	333	209	142	67.9	7
Central Avenue ....	327	184	141	76.6	7
South Market Street.	256	210	153	72.8	7
South Tenth Street..	340	188	149	79.2	7
Newton Street.....	263	199	164	82.4	6
Eighteenth Avenue..	274	179	136	75.9	7
Totals.....	3,153	2,040	1,512	74.1	81

The average nightly membership in each school for each month is shown in the following table:

School.	Oct.	Nov.	Dec.	Jan.	Feb.	Ave.
Evening High...	271	216	174	157	130	189
Webster Street..	395	336	294	264	221	302
Morton Street...	460	408	376	358	300	380
Lafayette Street.	310	230	212	158	135	209
Central Avenue..	281	212	152	153	124	184

School.	Oct.	Nov.	Dec.	Jan.	Feb.	Ave.
South Market St.	221	216	210	209	193	210
South Tenth St..	250	209	191	164	127	188
Newton Street...	249	220	197	183	146	199
Eighteenth Ave..	237	213	180	143	122	179
Totals...	2,674	2,260	1,986	1,789	1,498	2,040

### THE EVENING HIGH SCHOOL.

This institution continues prosperous. Its growth is steady and marked, but it contends with some of the difficulties that beset the district evening schools, viz.; irregularity of attendance, caused by distance in some cases, by overtime work in shops, stores, factories, etc., during the month just preceding the holidays in other cases. Notwithstanding these drawbacks it maintains its attendance and numbers well.

The course is now well worked out in its plan and distribution of subjects and work. The teachers are becoming familiar with the class demands, the order of the subjects, the habits and progress of the pupils. This has greatly intensified their interest and is leading to excellent results. As was stated last year, the influence of the Evening High School is being felt more strongly than ever by the other evening schools.

The first Commencement Exercises of this school took place in the audience room of the High School on Thursday evening, February 28, 1895. The room was crowded and deep interest was manifested throughout all the exercises.

Brief addresses were made by President Van Doren, of the Board of Education, the City Superintendent, Principal Kennedy, and other members of the Board.

Diplomas were awarded to the following graduates:

## GRADUATES 1894-95.

Joseph Fritsch,

Mary Penny.

The following named pupils were granted certificates:

James Byley,

Louis Fried,

Edward J. Skou,

Jennie Rosenbaum,

James Dalrymple,

Rebecca! Linda.

STATISTICS OF THE EVENING SCHOOLS FOR THE LAST  
FIVE YEARS.

Year.	No. of Teachers.	Enrollment.	Average Enrollment.	Average Attendance.	Per cent. of Attendance.	No. of Classes.
1891. . .	63	2,875	1,886	1,413	75.2	56
1892. . .	73	3,214	1,951	1,437	73.6	66
1893. . .	60	2,708	1,609	1,178	73.2	57
1894. . .	84	3,675	2,506	1,944	77.5	86
1895. . .	77	3,153	2,040	1,512	74.1	81

The above table shows that during the past five years, with the exception of 1893 and 1895, the increase in average enrollment and average attendance has increased from year to year in a marked degree.

## EVENING DRAWING SCHOOL.

All that has been said commendative in years past concerning this important institution can be repeated with emphasis. The Board is to be congratulated upon the success of this school under its liberal management.

The attendance is good, as the statistics show. The school is an honor to the Board and a great help to the mechanical classes of our city, who, I am proud to say, thoroughly appreciate it.

The following are the statistical details for the year ending May 1, 1895:

Number of pupils enrolled in each department:

	Males.	Females.	Total.
Mechanical Drawing.....	118	..	118
Architectural Drawing.....	100	..	100
Freehand Drawing.....	302	65	367
Totals.....	520	65	585
1894.....	510	52	562
Increase.....	10	13	23

The number of teachers employed during the year was 8, the same number as last year. The number of classes was 15, an increase of 1 over the previous year.

These classes contained in the average enrollment, 430, a decrease of 13 from last year; in the average attendance, 370, a decrease of 18 from last year.

Average enrollment for each month:

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Ave.
Mechanical Class I.....	50	51	51	49	48	41	40	47
“ “ II.....	39	36	34	33	28	27	23	31
“ “ III.....	24	24	22	20	19	19	17	21
Architectural “ I.....	50	48	42	39	41	36	32	42
“ “ II.....	23	23	24	23	22	20	19	22
“ “ III.....	21	17	16	16	18	16	16	17
Freehand “ I.....	50	48	42	38	34	33	26	39
“ “ II.....	50	45	39	45	43	41	32	42
“ “ III.....	52	56	44	46	39	34	32	43
“ “ IV.....	26	23	20	..	..	..	..	10
Model “ I.....	25	29	27	28	25	23	19	25
“ “ II.....	27	26	24	28	26	24	23	25
“ “ III.....	29	29	23	27	26	31	30	28
Designing “ I.....	29	26	26	30	31	32	29	29
“ “ II.....	22	21	19	..	..	..	..	9
Totals.....	517	502	453	422	400	377	338	430

## Average attendance for each month:

		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Ave.
Mechanical Class I	.....	45	45	43	41	42	37	36	41
"	" II	.....	35	30	29	28	25	24	28
"	" III	.....	23	22	19	18	17	15	19
Architectural	" I	.....	45	43	38	34	37	35	28
"	" II	.....	22	22	22	21	20	19	18
"	" III	.....	18	15	14	13	17	14	15
Freehand	" I	.....	43	38	35	31	27	28	23
"	" II	.....	45	38	35	37	37	35	26
"	" III	.....	44	43	39	35	32	28	27
"	" IV	.....	20	18	16	..	..	..	8
Model	" I	.....	22	24	23	25	21	19	18
"	" II	.....	24	22	21	23	22	21	20
"	" III	.....	24	24	18	22	21	27	27
Designing	" I	.....	25	23	21	26	26	26	26
"	" II	.....	18	17	15	..	..	..	7
Totals	.....	453	424	388	354	345	328	301	370

The following table presents the occupations of the 585 pupils enrolled in the school:

## MALES.

## MECHANICAL CLASSES.

Machinists	.....	72
Toolmakers	.....	14
Patternmakers	.....	11
Electricians	.....	7
Draftsmen	.....	6
Clerks	.....	8
	.....	118

## ARCHITECTURAL CLASSES.

Carpenters	.....	56
Plumbers and Tinsmiths	.....	12
Masons	.....	9
Stonecutters	.....	8
Draftsmen	.....	6
Clerks	.....	9
	.....	100

## FREEHAND CLASSES.

Jewelers.....	45
Engravers .....	24
Diecutters.....	5
Stonecutters and Stonecarvers.....	9
Machinists.....	8
Toolmakers.....	11
Draftsmen .....	7
Carpenters.....	5
Cabinetmakers .....	4
Woodcarvers and Woodturners.....	10
Electricians.....	3
Plumbers.....	5
Painters.....	24
Brassturners and Brassmoulders.....	4
Blacksmiths.....	3
Printers.....	6
Lithographers.....	4
Trunkmakers.....	5
Harnessmakers.....	5
Other Trades, Clerks, etc .....	115
<hr/> 302	

## FEMALES.

## FREEHAND CLASSES.

Enamelers.....	3
Jewelers.....	3
Designers.....	2
Teachers.....	2
Corsetmakers.....	4
Threadworkers .....	3
Stenographers.....	3
Other Trades.....	5
No Occupation.....	40
<hr/> 65	



The number of graduates this year was 42, an increase of 18 over last year.

They were distributed as follows:

Mechanical Class.....	15
Architectural Class.....	10
Freehand Class.....	17
<hr/>	
Total.....	42

Of the 17 graduates of the Freehand Class, 11 were males and 6 females.

Total number of graduates since the organization of the school, 237.

#### GRADUATES OF 1894-95.

##### MECHANICAL CLASS.

Gustav Baechtle,	Charles Meesel,
Herbert R. Hadley,	Edward Morgan,
Percy H. Johnston,	Roger Owens,
Andrew Knef,	Thomas Parker,
John Krasney,	Charles Schepppler,
John A. MacArthur,	Richard H. Stewart,
Andrew McCutcheon,	William R. Sunderland,
Peter W. Wortman.	

##### ARCHITECTURAL CLASS.

A. D. Clifford,	Louis Maier,
J. Wilbur Cole,	Thomas Sheerin,
Charles Goeller,	August Sherwood,
Henry Grobert,	Henry Trautwein,
Frank C. Jacobus,	Harry Van Duyne.

## FREEHAND CLASS.

## MALES.

A. J. Bird	Frederick Lusinger,
Carl Finke,	Charles G. Miller,
F. Greathead,	Charles Paterson,
William C. Heinz,	A. Rettenmaier,
Herman Henkel,	Edwin Sommers,
G. A. Wackenhuth.	

## FEMALES.

Katherine Byers,	Elizabeth Locke,
Pauline Heath,	Esther Schulman,
Clara Hanbo,	Anna Wissel.

Statistics of the Evening Drawing School for the last five years :

Year.	No. of Teachers.	Enrollment.	Average Enrollment.	Average Attendance.	Per cent. of Attendance.	No. of Classes.	No. of Graduates.
1891..	7	576	361	297	82.2	10	30
1892..	7	671	328	269	82.0	10	21
1893..	7	534	375	314	83.7	10	26
1894..	8	562	443	388	87.5	14	24
1895..	8	585	430	370	86.0	15	42

## SCHOOL ATTENDANCE.

Among the evils that affect the schools more or less throughout the country are irregular attendance and truancy. From every city comes the question, "how can these evils be removed?" Public sentiment seems not to be sufficiently aroused or pronounced enough to apply the radical remedy, a thoroughly enforced, wise and comprehensive compulsory school law. This seems to be the only really efficient last resort. In those countries

and cities where this has been done all the children of school age attend school regularly. A public school system costs much money, and the taxpayers are entitled to an adequate return. Every seat provided, represents a definite sum of money, which is largely lost when not occupied. Absence from school, except for the most urgent cause, is a serious matter of public concern, and should be so considered and treated by those in charge of the schools.

Teachers and principals especially have a great responsibility in this matter. I fear that some think that attendance is a matter that concerns the parents and the public, rather than the teachers. While it is true that without the coöperation of the home and the parents, the teachers and the school are put at a great disadvantage. Yet even then there is much that the school and the teacher can do. The idea seems to prevail in the minds of some that the teachers' duty ends in the class room, and that attendance or non-attendance is a matter for the public and the school authorities or the police department to care for.

We should not overlook the fact that schools are for the benefit of the public, by educating the children, and not for the purpose of furnishing convenient and pleasant occupation.

The organization of the school, its discipline, its certain, systematic, orderly and well controlled movements become a great power in building up the school and in attracting and retaining the pupils. The attitude of the teachers towards the pupils, and the policy and management of the school, as an organization, will do much in making its influence comprehensive, strong and permanent. The point urged here is that all that can,

should be done to make the school desirable, attractive and worth attending before we resort to extreme coercive measures outside. I know very well that after the school has done all it can, there will be some who cannot be reached by its measures or influence. These must be dealt with through other means. Here comes in the compulsory school law, the truant officer, the ungraded school and the use in many ways, perhaps, of special and unusual measures that cannot and should not be applied in the ordinary and general management. The subject of an ungraded school, for irregular and incorrigible pupils has been presented to the Board, and much information has been collected from many cities in different parts of the country. An institution of this kind, properly organized and administered as an aid in correcting the evils named, will be an advantage to the public schools of our city and a great help in securing larger and more regular attendance.

The truant department has been more efficient during the past year than at any time since its organization. It has done excellent work, both in the day and evening schools. In the evening schools, where the truant law has been wisely and faithfully enforced in connection with the postal card notices to the parents, the results have been very satisfactory. The full coöperation of the principal and the parent with the truant officer is necessary, that the work may be thoroughly done. All legitimate agencies that can be used to lessen the attendance upon the street school should be made as effective as possible. This street institution is practically always open. It has plenty of active teachers, who never take or even ask for a vacation. The ungraded school, and the truant department, and the earnest principal and the devoted teacher,

must coöperate in depriving, in so far as may be possible, the street school, with all its accessories of its dangerous influences.

The power of a great school is tested more effectually, than in any other way, by what it can and does do in its own vicinity in emphasizing its controlling influence over the forces that operate for good. I have known—I have in mind now—schools that have practically changed for the better whole neighborhoods, in the fact that the wise enforcement of regular, systematic, punctual habits among the children, and the influence of the discreet principal, the kind, firm, yet interested teacher, have a place and respect in the homes and associations of the pupils.

It is the hope of the Superintendent that the power and function of the school will, to the fullest extent possible, assert themselves in their influences rather than mere results of mechanical organization.

## TRUANT STATISTICS.

FOR THE SCHOOL YEAR, 1894-'95.

### DAY SCHOOLS.

Number of cases reported by the schools, 745, a decrease of 22 from last year.

Number of school children taken from the streets, not reported by the schools, and sent to school by the Truant Department, 52, a decrease of 12 from last year.

Number of children that never attended school, taken from the streets and sent to school by the truant officers, 31.

Total number of cases acted on by the Truant Department, 828, a decrease of 3 from last year.

Of the 745 cases reported by the schools, 82 were reported twice; 24 were reported three times; 13 were reported four times; 3 were reported five times; 1 was reported six times, and 1 was reported seven times.

Number sent to the City Home, 28, an increase of 18 over last year.

Of the 28 committed, 16 were recommended by the principals for this institution.

### EVENING SCHOOLS.

Number of cases reported by the schools, 246, a decrease of 10 from last year.

Of this number, 24 were reported twice; 11 were reported three times, and 3 were reported four times.

Number sent to the City Home, 3.

### LIBRARIES.

The relation of the school libraries to the work of the class teacher, also to the pupil in his studies, has been fully discussed heretofore, and it is therefore unnecessary to repeat here and now, any further than to say that the interest in them, by teacher and pupil, is increasing from year to year. The number of volumes, as may be seen from the following table, is multiplying, as is also the two-fold use, as first, circulating for reading purposes, and second, reference purposes, in connection with the investigation and study by pupils in the preparation of the school work. Their uses have become so well established that it would be difficult to conduct our schools without the library.

The following statistical table gives the condition of the public school libraries up to the present time:



Schools.	Amount raised during the year.	Amount received from the State. During the year.	Previously received.	Purchased during the year.	Number of Volumes. Previously purchased.	On hand.
Normal and Training.	....	....	\$60	26	593	619
High.....	\$39.00	....	100	44	2,378	2,422
Burnet Street.....	....	....	90	...	728	728
Webster Street.....	....	....	140	48	560	558
Washington Street...	....	...	30	...	533	533
Marshall Street... ..	....	....	30	...	23	23
Morton Street.....	....	....	70	...	985	839
Monmouth Street....	...	....	20	...	50	50
Lawrence Street . . .	...	....	70	..	391	391
Commerce Street....	...	....	60	...	50	50
Chestnut Street ...	....	....	60	...	582	582
Lafayette Street.....	....	....	40	...	380	326
South Eighth Street..	26.50	....	100	18	322	340
Thirteenth Avenue...	100.00	20	...	133	....	133
Central Avenue... ..	10.00	10	140	24	493	515
Warren Street.....	....	....	...	...	123	113
Wickliffe Street.....	...	....	40	...	...	...
Summer Avenue.....	200.00	....	60	30	881	814
Summer Ave. Annex.	....	....	30	School abolished.		
Elliot Street.....	....	....	...	...	97	95
Miller Street.. .....	28.00	....	80	26	414	282
Elizabeth Avenue....	....	....	20	...	17	17
Oliver Street.....	60.00	20	100	30	955	985
South Street.....	10.00	10	40	...	148	148
Thomas Street.....	....	....	40	School abolished.		
Walnut Street.....	10.00	10	100	1	363	364
Houston Street .....	....	....	30	School abolished.		
Roseville Avenue...	8.00	...	20	8	51	58
South Market Street..	....	....	20	...	263	262
Hamburg Place.....	10.00	10	80	50	359	400
South Tenth Street...	10.00	10	40	28	218	200
Camden Street.....	20.00	10	70	40	486	450
Newton Street.....	50.00	10	80	60	597	657
Eighteenth Avenue..	10.00	10	140	40	670	462
Eighteenth Av. Annex	....	...	20	School abolished.		
Livingston Street....	20.00	20	...	28	...	28
"Franklin".....	....	...	20	5	162	189
Totals.. .....	\$611.50	\$140	\$2 040	639	13,872	13,633

The foregoing figures show an increase of 2 libraries and 575 volumes over last year.

## HEALTH REPORT.

Among the many things of deep interest and importance in the organization and management of our schools, none is more vital than the provision made for the protection of the health of the pupils and teachers.

Any system of schools that ignores this question and thereby fails to make the fullest provision for placing the schools and all their surroundings in a perfectly sanitary condition, in all respects, is open, not only to severe criticism, but to public condemnation.

I wish to say that the Board of Education has been and is vigilant and very active in caring for the school buildings and the premises attached thereto, as to their sanitary needs. The past year, and the present up to date, have, through the efficiency of the president and the committees, been noted for many improvements that have greatly benefited the healthfulness and physical comfort of the schools.

The importance of light, ventilation and proper warming of the class rooms and all the surroundings has never been realized and appreciated as now, and I am much encouraged in the belief and hope that every means will be used to still further improve the healthfulness of the public schools of the city.

The following tabulated statement, furnished by the principals of all the schools, shows a good condition of health among the teachers and pupils.

It will be noted, upon examination of this table, that there were no deaths among the teachers and only 62

among the pupils, with an enrollment of nearly 30,000 and with an increase of 19 in the number of teachers. In comparing this with the preceding year, 1894, we find 3 deaths among the teachers and 88 among the pupils, 26 more than for 1895. This certainly is a good showing, and we can fairly deduce therefrom the conclusion that the sanitary condition is improving, and consequently the health of the schools.

I would ask the Board, the teachers and the public to note with careful attention these comments and the accompanying table:

Schools.	Deaths.		General Health.	
	Teachers.	Pupils.	Teachers.	Pupils.
Normal and Training.....	..	1	G.	G
High.....	..	2	E.	V. G.
High Annex.....	..	..	E.	V. G.
Burnet Street.....	..	..	E.	E.
State Street.....	..	2	E.	G.
James Street.....	..	1	G.	G.
Webster Street.....	..	1	V. G.	G.
Washington Street.....	..	1	G.	G.
Marshall Street.....	..	2	G.	G.
Morton Street.....	..	3	V. G.	V. G.
Broome Street.....	..	..	V. G.	V. G.
Court Street.....	..	..	V. G.	V. G.
Monmouth Street.....	..	8	G.	G.
Lawrence Street.....	..	..	G.	G.
Commerce Street.....	..	..	G.	G.
Colored.....	..	..	G.	G.
Chestnut Street.....	..	..	E.	E.
Lafayette Street.....	..	3	E.	V. G.
Clover Street.....	..	..	G.	G.
South Eighth Street.....	..	..	V. G.	V. G.
Thirteenth Avenue.....	..	2	V. G.	V. G.
Central Avenue.....	..	1	G.	G.

Schools.	Deaths.		General Health.	
	Teachers.	Pupils.	Teachers.	Pupils.
Lock Street.....	..	1	G.	G.
Warren Street....	..	2	G.	G.
Wickliffe Street .....	..	..	G.	G.
Wickliffe Street Annex.....	..	..	V. G.	V. G.
Summer Avenue.....	..	..	E.	E.
Elliot Street.....	..	2	F.	F.
Ridge Street.....	..	1	V. G.	V. G.
Miller Street.....	..	..	G.	G.
Elizabeth Avenue....	..	..	G.	G.
Oliver Street.....	..	5	E.	G.
South Street.....	..	1	G.	F.
Walnut Street.....	..	..	E.	G.
Ann Street.....	..	..	G.	G.
North Seventh Street.....	..	1	G.	G.
Roseville Avenue.....	..	1	G.	G.
South Market Street.....	..	5	G.	F.
Hamburg Place.....	..	..	V. G.	V. G.
Hawkins Street.....	..	1	G.	G.
South Tenth Street.....	..	2	E.	V. G.
Holland Street.....	..	..	E.	V. G.
Camden Street.....	..	1	G.	G.
Waverly Avenue.....	..	6	V. G.	G.
Newton Street .....	..	1	E.	E.
Eighteenth Avenue.....	..	2	G.	G.
Livingston Street.....	..	2	G.	G.
"Franklin".....	..	1	G.	G.
Bloomfield Avenue.....	..	..	G.	G.
<hr/>				
Totals.....	..	62	12 E.	4 E.
			10 V. G.	13 V. G.
			26 G.	29 G.
			1 F.	3 F.

[E., Excellent ; V. G., Very Good ; G., Good ; F., Fair.]

In connection with this health report I can say that the physical training in the schools, generally, is in a good state of development and practice, much better than ever before. These physical exercises have led, as a matter of necessity, to a more frequent opening of windows and doors and hallways during these active movements without exposing the students to danger from drafts. This is a great gain in this direction.

The instruction in the Normal School, by the teacher of physical culture, is beginning to bear good fruit in sending out into the classes teachers well instructed and trained in this important department of our school work. I can speak in strong commendation of the work done, under the instruction and direction of the teacher in charge in the gymnasium. This work was never so well done and supervised as now, nor so generally effective. I do not say that every school or every class is equally efficient.

### MUSIC.

This subject is making commendable progress. As has been stated already, it is no easy matter to place on full grade, in a large system of schools as in Newark, a new subject that has never been thoroughly taught in the schools before. Every grade must practically begin with the lowest and work up to the highest. This, of course, takes time. The course covers eight years—four in the primary classes and four in the grammar—to be followed by the High School and then the Normal School, where the work necessarily becomes professional, that is taught with reference to preparation to teach.

This subject has been fully outlined in previous reports and will not be repeated here. The classes are coming

on to their full grade, which, when reached, will greatly facilitate the instruction in this department.

The Board in its wisdom, upon the recommendation of the Committee on Teachers with the Superintendent, appointed as assistant to the Director in Music, Miss Lulu Westwood. She assumed the duties of this position at the opening of this school year, September last. She has given instruction almost entirely in the primary grades. Her success thus far promises much for the future.

The Superintendent feels that the musical instruction in our schools is making good progress, in the main. There is now and then an exception, where the interest and progress are not all he desires. This, however, will soon disappear, as the work grows and the class teachers become more proficient in their work.

Since the opening, this year, the director, Mrs. Griggs, has held a series of grade meetings of the teachers, which were largely attended, nearly every teacher being present. The attention and interest were good.

In consequence of insufficient room, for class instruction in music, in the High School, all that we desire to do cannot be done; yet good work, especially in the annexes, is being done.

## DRAWING.

The importance of drawing as an educational aid, accompanying all the other subjects in the school course of study, is exemplified in the nature, study and the elementary science work, introduced in the new course of study and now being quite successfully carried out in all the schools.

The work done in the primary grades in drawing the



forms studied by the children, is really wonderful. Before the introduction of drawing into the schools, such work was an impossibility. The child is compelled to observe and study with great closeness the objects put before him. This is a great educational gain to the pupil in all his student work in school and out, and the useful habit will go with him through life. These are advantages that are not always considered by those who may consider drawing a minor subject in our course.

The Superintendent has in his office considerable work taken from the class rooms of several schools that illustrate well and emphatically these statements.

The interest in this kind of training is growing from year to year throughout all schools in the country. There are but few cities, villages or towns that do not now have drawing and the kind of hand training that comes from this form-making and study.

The condition and progress of this phase of the school work are healthy and progressive, and will bear commendation.

## MANUAL TRAINING.

Manual training has taken its place in nearly all our large cities as a part of the system of school instruction, and while it is not fully worked out and applied in all its lines and details, it is recognized by the leading educators in our lower and higher schools as an important and, we may say, a necessary educational force.

When the manual training idea first commanded the attention of educators and school men, the value of the industrial skill attained thereby was the one thing noted. The knowledge and conviction that the training of the hand and the senses, generally, was a great educational

means necessary to the full and accurate development of the mental powers, were not fully comprehended.

It is a matter of common notice that the pupils who have taken the manual training work in the schools where it has been introduced, have not in any degree fallen behind in the regular text book course, although they have given several hours per week to the manual work. On the contrary, they have shown great zeal, aptness and application in the regular lesson work, and have maintained their standard through all the examinations.

I feel sure that manual training as a means of general education, and as a method of intellectual culture, and a means of promoting accurate expression, must be generally acknowledged. And I think further that it has great value as a preparation for the industrial or professional pursuits, or for advanced technical education, and I am forced to the conclusion that the time is not far in the future when it will take its place side by side with all other educational methods.

I would therefore recommend that the Board place this matter of introducing, at some feasible point, manual training into the course of instruction in the system of education for our city, in the hands of the Committee on Text Books, Course of Study and Examinations, with the Superintendent to consider with reference to the formulation of a practical and economical plan for its introduction.

#### SOME SUGGESTIONS CONCERNING CLASS ROOM WORK.

I will take the liberty to quote a brief paragraph or two from the Annual Report for 1891, as follows:

“Whatever may be our views and theories concerning

the function and the purpose of the school, the final results obtained must be wrought out in the class room by the class teacher. Here is the crucible in which must be tested the true value of all theories and methods.

"As the teacher, so is the class," is a maxim, the truth of which is attested by all experience. There is no gage that adequately measures the large and true teacher. The merchant can estimate the value of his merchandise, the farmer his products, the manufacturer his commodities, the banker and the railroad man their capital and stock. These are all material products, subject to measure and accurate book-keeping. The teacher's work is in another realm, and with different materials to work upon, and with products that cannot be weighed in the material balance, or measured with the footrule, or estimated by the ordinary contractor. Nothing but mind can measure mind."

This seems to place the class room and its work in the right light. Its importance is not overstated. The class room, with all its influences and opportunities, is the very pulse of the school. If these statements be true, and we believe they are, the character, quantity and quality of work done here is of the greatest moment.

Let us briefly consider the following: Attention, study, recitation. These qualities are of the greatest interest in all our class room work; without them our schools would be practically worthless.

I place at the head of this trinity, attention. In the absence of this everything fails, so far as teaching, training and education are concerned. I do not hesitate to affirm that the teacher who fails to secure the attention of her pupils, fails in everything. This is emphatic language. It is the oft repeated opinion of all psychol-

ogists and students of education, that no study, teaching or progress can be assured without this fundamental qualification, attention.

Attention is a concentrated, intensified condition of mental activity, directed to some special subject under consideration. It is an attitude of the mind towards subjects or objects before the mind for examination.

Attention is classed under two heads, viz.: Passive and volitional. The attention of the young child is classed as passive or non-voluntary, while in the older child it becomes more and more, according to the training, volitional or voluntary, that is under the direction of the will.

The one great law of attention, through all its stages of development, is interest. The doctrine of interest and the doctrine of the development and growth of ideas or, as philosophically called, apperception, are the corner stones of the Herbartian theory and philosophy of education. There is no subject of deeper concern to the teacher and the student of education than the above named.

How to awaken and retain the interest of the child in his work is a great problem and not easy of solution. Many are the devices and methods resorted to by teachers to reach this result. Without stopping here to discuss or elaborate this phase of the educator's work, I would simply and briefly state that no method, plan or device can or ever will take the place of the expressed personality of the teacher. The personal power of the great, the trained, the all-round teacher, is well nigh omnipotent. No language can be too emphatic in expressing this great, this fundamental law of all successful teaching.

The natural law underlying and governing this is,

appeal to the pupil's activities—mental, moral, physical and æsthetical. The field here for creative skill, method and device is wide, almost limitless. Nothing taxes the resources and skill of the teacher as does this work. Originality and personal power should have an unlimited opportunity here. I would urge the principals to encourage, direct and train by precept and example the teachers associated with them along this line of study and investigation. Allow me to add that the teacher should have the widest liberty and opportunity for the use of her originality and inventive powers.

The next point that claims our attention is study. I fear some, if not many, of the teachers are at fault in their conception of the nature and true function of study. Of course if we do not understand what true study is—its purpose or aim, what takes place in the mind when it studies or observes objects of thought, when it investigates any subject—our methods of securing and directing the study will, most likely, be wrong and will lead to unsatisfactory results and, worse still, to bad habits of mind, which are always hard to remove.

The greatest difficulty now in the way of the pupil's acquiring the true method of study is the memoriter study of lessons, verbally from the text book. The tendency of this method of study is to make the mind passive, simply receptive, instead of active and constructive, creative, the very essence of mental growth.

The pupil should be taught and trained to study, to apprehend, comprehend and understand, rather than to merely remember. The memory is likely and pretty sure to do its work well when the understanding is clear.

The lessons should be assigned and outlined by topics or themes, and the teacher should prepare them after



this plan. I know some will say the young children cannot study in this way. Allow me to remind such that until they, the children, are hindered with mere verbal, memoriter book lesson work, they study just this way, using observation and investigation upon all the objects and topics that come before them. This fact is an emphatic illustration of the importance and great advantage to the teacher of having a practical knowledge of the nature and methods of the child.

Watch the child in the kindergarten or on the playground, and you will witness some of the best and most profound analyses and classifications to be found anywhere in the whole range of educational thought and investigation. A kindergarten is a laboratory of observation and investigation, as well as the practical application of the fundamental principles of child nature. I often wonder that so much of this original work is overlooked and dropped out of the school methods as soon as the child leaves the kindergarten stage, and does not appear again until the university laboratory is reached. That this is a fact can be readily ascertained by a comparison as to their nature, purpose and methods of the kindergarten and the university laboratory.

I am not to be understood as favoring the substitution of objects in place of the true mental product—concepts; far from it. The object only stimulates the mind to create and construct thoughts from the concepts.

What we need is methods of study and teaching that will make our pupils independent, self-helpful and aggressive in the great world of knowledge and activity, rather than merely submissive and receptive.

In discussing the importance of class room work it is not possible and, I may say, it is not desirable to give



minute and detailed directions for conducting recitations and other exercises. Could, or should this be done, the originating, inventive and creative power of the teacher would be sadly crippled, if not entirely destroyed. The teacher should be left as free here as can be safely, giving due regard to the experience and wisdom of the past. The most and the best we can do is to call attention to some principles of universal application and give a few hints bearing upon sound class management.

What is the purpose of this class work? We call it recitation or class period. I consider the term unfortunate. It carries with it, and it is very widely understood to mean and require the verbal reciting of the language of the book as an effort of the memory only.

The leading purpose may be classed under three heads, viz.:

First, To furnish an opportunity for the mental activity of the pupil's mind in using, in a properly directed manner, the results of study and special preparation.

Second, The instruction of the class by the teacher. This, of course, includes various forms of teaching, as oral, written, interrogative, topical discussion, and for want of a better name I call it mutual class interrogation.

Third, Testing in all its forms. With the skilful and resourceful teacher these are many.

In the various processes of instruction the discussing, learning, testing and reciting may and do go on in many cases together, though they may all be considered and used apart.

There are two forms of testing, viz.: By examination and by drill.

The examination reveals mainly the content of the mind.

The drill tests the ability and skill of the pupil in prompt and rapid application of principles and processes.

The true purpose of drill should not be lost sight of. It loses most of its value when used only in working out in the class the examples and questions previously worked or analyzed. This is merely the reproduction of memory matter that has been prepared for memory recitation. The original, creative, inventive power of the mind is left unused. This is the power of self-helpfulness. The drill work should be with new questions, new problems, requiring the recognition of the law and the application of the principles. You cannot fail to see that this will test the developed and trained power and skill of the pupil.

I will note briefly some of the necessary conditions of successful class room work.

The first condition to which I would call attention is the importance, I may say necessity, of a strong and efficient organization and administration of the school; without this but little satisfactory work can be done by any teacher. The one altogether responsible for this organization and administration is the principal. All I think will agree in this. We do not understand by this that all will or should organize and administer alike, or on the same detailed plan and with the same methods. No one can be a stronger advocate and defender of the personality and liberty of the principal and the class teacher than I am. It is the corner stone of my whole theory of education.

What we wish to affirm here is, the organization and administration must be strong in the elements of efficiency. That is, all the conditions in the school must be favorable to obedience, good order and successful teaching.

Much more can be said here, but we are content to leave this department of the work with the principals, believing they will see and appreciate its necessity.

The next consideration presented is, a thoroughly competent class teacher.<sup>6</sup> It gives me pleasure to say that I believe we have in our class rooms many such, and the number is constantly increasing. It requires much to equip the competent teacher. I need not stop to enumerate these qualifications. They are well known to all who know the school, its requirements and the teacher. Allow me to say in this connection that the principal, as the supervising force, directing the whole plan of the school and infusing into it a noble spirit of devotion and enthusiasm, can do much for the teacher in all departments of her work in development and training. Our schools show some excellent illustrations of this kind of influence.

The third point I invite you to note and consider is, the physical condition of the school rooms, pupils and teachers. I know this has been discussed time and time again; yet the evils growing out of neglect here have not disappeared. There is a very great difference in the various schools in the attention given to it. In some schools, and in some class rooms, there is hardly any need for criticism. The very great importance of this matter I need not now urge further; it must be clear to all. I will, however, make the following suggestion, that more attention and consideration should be given to the condition of the weather and influences outside of the school room. These are of great importance in their bearing upon the ventilation of the school rooms. Often the ventilation or non-ventilation depends entirely upon these conditions and influences, a knowledge of which would

enable the teacher to so adjust the ventilating arrangements, whatever they may be, that a satisfactory change of air will be secured.

The fourth point is the necessity of close and sustained attention on the part of the class—the whole class. This is so apparent and has been so fully presented that nothing further need be said here.

Fifth, The importance, the necessity of ample and suitable appliances, as books, maps, globes, charts, diagrams, blackboards, properly located and of good size, pictures and objects almost without limit. This department of our school work is being rapidly enlarged in many directions in a number of the schools. The past year has been a fruitful one. This is the beginning of the influence of the new course of study, an influence that, I have no doubt, will extend generally among all the schools.

Sixth, The power of presentation of subjects to the class by the teacher. This cannot be overvalued. One of the chief qualifications of the successful teacher is this; she can place the subject matter properly and skilfully before the class.

Among the essential qualities of the teacher that will enable her to do this are:

*a.* Personal presence, her personality; her entire bearing in all respects before the class. It is sad, often, to see all this power thrown away for want of this presence and personality. How to make the most of these natural gifts is worthy of much thought and attention by the teacher.

*b.* A thorough knowledge of all subjects taught as to the facts in their content and relation to other subjects in the course. A full and fresh knowledge that comes

only by long, thorough and frequent preparation, is an absolute condition of the successful teaching of any subject. The one preparation for to-day's lesson will not suffice for the demands of future lessons.

*c.* Skill at the blackboard. This is comparatively a rare possession. I am surprised at the very small number of teachers who seem to realize its great importance. To become skilful here requires much thought, patient and careful practice. The teacher who can talk with the chalk seldom fails in commanding undivided attention. The power of rapid and apt illustration in presenting and unfolding the topics, themes and principles of the subjects before the class, is of the greatest value to the teacher. How often does the teacher skilled at the blackboard find that when the oral discussion and written description fail to present the subject well and to reach the understanding of the pupil, a few well aimed strokes clear up all the doubt and difficulty, and the lesson goes on successfully. There is no instrumentality of illustration that can equal, or in any measure take its place. It is true that printed maps, charts, diagrams and tabulated forms are useful and often very helpful and should not be overlooked, but they all lack that element of life and inspiration that comes from the presence of the skilled teacher, chalk in hand, causing the subject to grow step by step, as the understanding of the pupil opens to receive. This appeal to the pupil's mind through the graphic powers, deserves the serious attention of the teacher, and as much preparation and practice as may be necessary to enable the teacher to use it to the best possible advantage of the class.

*d.* Fresh preparation by the teacher. There is much misapprehension, I fear, as to what this means. Some



seem to think that a little superficial examination, or even looking over the lesson, simply, as presented in the text book, as to the verbal statements, is all that can be expected of the teacher. This inadequate, we may say false, notion is, in my judgment, the reason why so many teachers come before their classes wholly unfitted to present and conduct successfully the lesson. This preparation of the teacher requires a mastery of the subject from the academic or scholar's standpoint; also from the pedagogical or teacher's view point. When these unite and harmonize the teacher is in the way of full preparation.

Seventh, Much discussion has been given to the various methods of presenting and teaching the various school subjects. Permit a few suggestions along this line.

*a.* Assignment of lessons. This is an important part of the recitation hour. We cannot, we will not, attempt to give definite rules for this, for the reason that much will and must depend upon the nature of the subject; much upon the condition and character of the class as to age, advancement, habits, etc. Often it may happen that the assignment of the lesson is a leading part in the presentation and instruction, and time and skill should be given to this important feature in the class work. Here the teacher has an invaluable opportunity to indicate and outline the direction and form of study and investigation; to point out references for special and general reading. Also to set forth clearly the intent of the exercise, for every exercise or lesson should have a well defined purpose, which, if missed, the lesson is practically lost. To do well all this, requires the teacher to make thorough and up-to-date preparation. This is not by any means the least part of the exercise.



*b.* The steps in teaching. These are determined by the nature and laws of the mind; the nature of the knowledge to be taught, and the relation between them :

1st, We may note them as the division or topics of the subject.

2d, The introductory steps.

3d, The analysis and discussions. This is the part to which all preceding steps lead.

4th, Methods of teaching and testing. It is not possible or well to give any one method as the only or best method. The treatment of all subjects is conditioned, sometimes in many ways. The same may be said of the methods of drilling and testing the pupil's work. This attempt to solve all the questions by some one formulated stereotype method has been and is yet, to some extent, at least a defect, or perhaps better named, a mistake in much of our Normal School instructions. The instinctive personality of the teacher is ignored.

### TEST IN WRITING.

I desire just here to comment briefly upon a test that has just been given to the seventh and eighth grades, and sent to the Superintendent's office for his inspection, also for examination by the Text Book Committee. These, of course, are grammar grades. This test included all the pupils in these grades, and consisted in writing a social letter by each pupil, on letter sized paper furnished by the Superintendent. This was comparatively impromptu. No time was given for special preparation.

These papers have been inspected by the Committee on Course of Study and Examinations, the Superintendent and many other persons, including principals and some

of the class teachers. That this might the more readily be done, the papers were placed where they could easily be reached without asking for the privilege.

There has been a large amount of favorable comment and some considerable criticism, mainly of the composition, spelling and penmanship. While there is much to commend, we must not forget that these are in the seventh and eighth grades, and we have a right, at this stage of the school course, to expect excellent work in all respects.

The great difference in the schools, the classes and the individual pupils is very apparent. No one can fail to observe it. The remark has been, and is now frequently made, as an excuse for poor penmanship, that it is not always, in fact, never a test of intellectual development and power. This is true, without doubt. But permit me to call attention to this feature of the work. The exercise tested the penmanship, the arrangement of the letter form, the composition as to thought and strength of the spelling, the syllabication of words and the rhetorical expression. Here seems, in this exercise, to be an abundance of room and opportunity for examining and practically testing the mental power, as well as the penmanship.

I wish to note another fact, that, as a rule, the papers showing the best penmanship, in all respects, are among the very best in composition, spelling and intellectual manifestation. This would indicate, at least, that good penmanship and arrangement do not necessarily prevent good thinking and good composition. I think there is no one thing in our school course that shows the trend and quality of the training and culture in our schools so surely and so fully as does the composition work. All the subjects, and the whole mind of the pupil, are leavened

and matured by it. And further, the great advantage and beauty of this is, that it may accompany, in its best use, all the subjects pursued. It is an attendant upon every step in the pupil's intellectual and culture progress. My plea is that good penmanship is a necessary acquirement for practical life ; it does help and does not hinder the true advancement of the pupils.

Writing, as we have repeatedly said, must be taught—must be well, thoroughly and successfully taught. The work begun in this test examination will be continued with all the help the experience received will give us.

The Superintendent has asked the Committee on Examinations to furnish a writing chart of standard forms to each class, in order that the correct forms may be always before the teachers and the pupils, and that these forms may be uniform throughout the schools.

I would also recommend that an expert teacher of penmanship be appointed to teach this subject to the Normal pupils, with special reference to successful instruction in writing.

### SPELLING.

Again I will venture to speak concerning spelling. This subject also is considered no test of intellectual power and training. Yet we all know that no deficiency calls down upon the head of the offender such ridicule and condemnation, as poor spelling. One of the severest criticisms now offered against the schools generally throughout the country is, the pupils do not spell well. I know this to be true in my office experience, and there is no question of its truth elsewhere.

Dr. Rice has been for some time testing schools in different cities and in different parts of the country in spelling. He finds much poor spelling.

I desire here to call attention to the inability on the part of many of our pupils to properly divide words into syllables; this is shown clearly at the end of a line when the word must be completed on the next line. In my judgment this has been largely caused by spelling without pronouncing the syllables clearly and distinctly when spelled. A syllable is as much of a word as can be, and is uttered by a single impulse of the voice. The pupil does not clearly note and specialize a syllable until the voice utters it. I think this can and will be better done in connection with suitable practice in oral spelling than in any other way. The almost total disuse of oral spelling is responsible for this defect in syllabication. Further, the pronunciation of words has suffered seriously from the same cause. Note I am not advocating oral spelling as the best way, or even a good way of learning to spell. It is the vocalization of words that I am emphasizing now—utterance, enunciation, pronunciation and syllabication. These are important elements in the phonic use of words and should be thoroughly mastered before the pupil can fairly consider them a part of his vocabulary, his possession. I call upon the principals and teachers to give special and persistent attention to these points, as suggested in the foregoing discussion, until these defects are corrected.

I further call attention to another matter of great importance to the pupil, which should receive thorough attention, viz.: The inability of very many pupils to help themselves in making out and properly pronouncing new words. He is obliged to rely altogether too much upon the teacher. The pupil simply reproduces or imitates the teacher, or what he hears. The proper or practical study of phonics will eventually remove this difficulty.

I earnestly commend the good work done by a goodly number of the principals and teachers in this direction.

Phonic elements, taught merely as an exercise for their own sake, is of little or no value, but as a means of helping the independent oral composition of words they are of great value.

The proper and practical use of the accepted diacritical marks, as a help in determining the pronunciation of words, should receive thorough and systematic attention through good practice in using the dictionary. I hear the criticism frequently made that our pupils, even graduates, cannot use readily and successfully the dictionary. While this criticism is doubtless overdrawn, it is undoubtedly true in some cases, too many. These marks are simply means of self-helpfulness, and should be well mastered in practice while taking the school course in the primary and grammar schools, in order that if the pupil continues no longer in school he can help himself in all these directions, and if he continues his higher school work he will be armed and equipped with the necessary instrumentalities. Permit me just here to say that a good spelling book, containing all this instruction, practice and illustration, can be made an invaluable help in this work. The spelling book is not a dead letter. Of course the book must contain what is needed and must be used for that purpose.

I would also urge again, that all the written lesson exercises should be so done that they become really lessons in practical penmanship, as well as in spelling. One year of practice in this way will show results beyond our largest hopes.

The principals are in charge of all this work in the schools under their direction, and I ask that they give it their efficient attention.



## WHAT THE BOARD HAS DONE FROM 1877 TO 1896.

It is well, occasionally, at least, to review the ground gone over, that we may note what progress, if any, has been made. The past nineteen years have been years of growth and advancement of the city in all its substantial interests, but in none more than in the educational progress, as shown in the enlargement and improvement of the public school system in all respects, as the following data clearly indicates:

Under the present superintendency of the schools, much attention has been given to all the interests pertaining to the growth and elevation of the school system of Newark. Among the chief means used for realizing this was the better preparatory training and elevation of the teacher. This cannot be done without the means for such education and preparation, which must come in large measure through professional educational training. Practically the first step taken was the organization of the daily Normal School, which required the pupils to attend the regular school days and sessions of the city schools. The course at first was one year. A few years convinced the Board that a two year's course would greatly increase the value of the institution to the teaching force for our schools. The course was strengthened. In due time the Normal and Training departments were united under one principal, which again greatly advanced the work and influence of this essential part of our system. This is the condition of the school now.

The next step taken was the reduction of the very large classes in some of the primary<sup>1</sup> schools. We then had classes numbering from 60 to 120 pupils, and in some



cases crowded into small, poorly lighted, warmed and ventilated rooms. While a great stride has been made, there is in some localities room for improvement yet.

In 1882 the Evening Drawing School was organized with two classes in two small rooms in the Commerce Street building. It has grown to be one of the most valuable and useful institutions under the direction of the Board. It now occupies a three-story building, constructed expressly for it, and numbers some six hundred pupils. It is a great addition to the industrial and artistic education of the city.

The number of the formal examinations have been reduced to two per year, and the plan of preparing questions and conducting the examinations modified and in many respects improved, to the satisfaction and relief of teachers and pupils.

A system of Summer schools was established in 1886, for the large number of children who were unable to leave the city during the long summer vacation. These were largely attended and greatly appreciated by many citizens. Their condition and success are set forth in the statistical report of them presented every year by the Superintendent.

A system of honorary promotion and graduation, and a new method of rating the standing of pupils and teachers, was adopted in 1887 and 1888.

In 1878, with the aid of the state, libraries were established and extended in nearly all the schools in the city. These are now a great help to the pupils. Their number, condition and distribution are shown in the statistical report on libraries.

Special instructors in drawing, music, physical culture and elementary science have been appointed, and are

doing most excellent work in their respective schools and departments.

The Evening High School was organized in 1890, and has grown, in the few years of its existence, to be the head and front of the Evening School system. It is destined to exert a great influence. It is large and in excellent condition.

A kindergarten department has been established in the Normal School; and kindergarten classes opened in several primary schools, with other classes under contemplation. This is a long and important step in our elementary work.

The departmental method of instruction has been extended through all the departments and grades of the High School. It is safe to say that the standing and efficiency of this school are more satisfactory than at any period in its history.

A new course of study has been prepared and adopted and is now in full force in all the schools. This has led to a greatly increased activity among principals, class teachers and pupils. And while it is not perfect, but is open to criticism, it is susceptible of much enlargement and improvement which it will receive as the practical school room experience shall point out.

Physiology, algebra, elementary science or nature work have been added to the course, and excellent progress is being made in them, without detriment to the other subjects.

The Teachers' Institutes have been reorganized and much improved in their purpose and method. All penalty for non-attendance has been abolished, yet the attendance has been larger than ever. The interest in them is deep and the instruction of a high order.

The Superintendent's meetings with the principals have been largely attended and have commanded the attention of the entire body of principals.

The meetings of the class teachers with the principals in their respective schools have become a necessity, and are exerting a great influence upon the management, instruction and prosperity of the schools. The Board has done well in providing for and encouraging these influences.

The number of school buildings erected or purchased from 1877 to 1895, inclusive, is 19. The number enlarged or remodeled is 20, making a total of 39.

The following school statistics for this period, viz.: 1877 to 1895, are grouped in a table for comparison and ready reference.

	1877.	1895.	Increase.
Amount expended for support of public schools, current expenses.....	\$209,152.36	\$577,187.38	\$368,025.02
Amount expended for purchase of sites, erection of buildings, etc., from 1877 to 1895, inclusive.....	.....	788,133.08	.....
Amount expended, teachers' salaries... ..	161,472.59	409,609.33	248,136.74
Amount expended, janitors' salaries.....	10,501.26	35,688.16	25,186.90
Amount expended, text books, etc.....	8,144.99	24,290.64	16,145.65
Amount expended, repairs... ..	7,216.69	19,745.94	12,529.25
Amount expended, furniture and supplies.....	2,482.15	10,322.67	7,840.16
Amount expended, heating apparatus and fuel.....	6,987.26	27,758.36	20,771.10
Value of school houses, etc..	867,000.00	1,606,875.00	739,875.00
Annual cost per pupil.....	15.16	19.62	4.46

	1877.	1895.	Increase.
No. of school buildings owned	25	44	19
“ “ “ rented	4	7	3
“ class rooms.....	251	523	272
Seating capacity.....	15,347	28,078	12,731
School enumeration.....	37,315	54,634	17,319
Pupils enrolled, day school...	17,731	29,767	12,036
Average enrollment.....	12,762	23,363	10,601
“ attendance.....	11,129	20,727	9,598
Number of classes.....	234	485	251
“ “ male teachers....	29	38	9
“ “ female teachers..	221	485	264
Total number of “ ..	250	523	273
No. of primary classes.....	156	312	156
Enrollment in same... ..	12,520	21,207	8,687
No. of grammar classes.....	76	144	68
Enrollment in same.....	4,297	7,352	3,055
No. of grammar school grad- uates .....	208	707	499
No. graduated from grammar schools from 1877-95, in- clusive.....	.....	8,763	.....
No. of high school classes...	12	27	15
Enrollment of same.....	480	1,129	649
No. of high school graduates.	60	103	43
No. of graduates from high school from 1877-95, in- clusive.....	.....	1,608	.....
No. of normal school classes..	.....	2	2
Enrollment of same... ..	.....	79	79
No. of graduates since organi- zation of school, 1880.....	.....	549	.....
No. of evening schools.....	4	10	6
“ classes.....	26	96	70
Enrollment of same.....	1,186	3,738	2,552
No. of teachers employed....	29	85	66
No. of summer schools.....	.....	8	8
“ classes .....	.....	57	57
Enrollment of same.....	.....	3,088	3,088
No. of teachers employed....	.....	62	62

## CONCLUSION.

In conclusion, I think the facts and figures set forth in the foregoing report will warrant the inference that the year has been a successful one. The schools have been uninterrupted in their sessions and work. The progress has been steady and in the right direction.

Interest in the cause of public education has never been so deep, active and widespread. The affairs of the schools have been administered with much wisdom and vigor by the Board of Education, which is deserving of much commendation.

The Committees of the Board have been prompt and very efficient in the performance of duty, as the condition of the schools in all respects evidence.

I most heartily thank the Board, the Secretaries, Superintendent of Erection and Repairs, and all the clerks, for their uniform and ready support in all my efforts in the interest of the schools.

I also extend many thanks to the principals and teachers for their continued and earnest cooperation in all the work for the advancement of public education in our city.

Respectfully submitted,

WM. N. BARRINGER,

*City Superintendent.*





PART III.

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**A**PPENDIX.

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SCHOOL DIRECTORY.  
BUILDINGS.



# SCHOOL DIRECTORY.

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## BUILDINGS.

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### NORMAL AND TRAINING.

Location, Market street, near the Court House.

Erected, 1847.

Opened, January 2d, 1848.

Enlarged, 1883.

Class Rooms, Eight.

Janitor, ELLSWORTH MOORE, 111 William street.

### HIGH.

Location, Washington street, corner Linden.

Erected, 1853-54.

Opened, January 7th, 1855.

Enlarged, 1883.

Improved, 1886.

Class Rooms, Nineteen.

Janitor, RICHARD WHITE, 196 Plane street.

### HIGH SCHOOL ANNEX (BOYS).

Location, 103 Washington street, near Bleecker.

Rented.

Opened, September 15th, 1888.

Class Rooms, Six.

Janitor, MRS. MARY A. BENNETT, 98 Central avenue.

## HIGH SCHOOL ANNEX (GIRLS).

Location, 5 Washington street.

Rented.

Opened, September 9th, 1895.

Class Rooms, Six.

Janitor, MRS. JULIA BLAKE, 46 Warren street.

## BURNET STREET.

Location, Burnet street, between Orange and James.

Erected, 1868-69.

Opened, September 6th, 1869.

Class Rooms, Sixteen.

Janitor, ANDERSON J. GRESHAM, 86 Bleecker street.

## STATE STREET.

Location, State street, near Broad.

Erected, 1846-47.

Opened, 1874.

Enlarged, 1882.

Class Rooms, Ten.

Janitor, FRANCIS J. GRIFFIN, 50 State street.

## WEBSTER STREET.

Location, Webster street, corner Crane.

Erected, 1855-56.

Opened, April 20th, 1857.

Class Rooms, Twelve.

Janitor, HUGH COYNE, 11 Crane street.

## WASHINGTON STREET.

Location, Washington street, near Kinney.

Erected, 1868.

Opened, September 3d, 1868.

Class Rooms, Fourteen.

Janitor, ANDREW J. DAY, 87 West Kinney street.

## MARSHALL STREET.

Location, Marshall street, corner Coe's place.

Opened, October 23d, 1882.

Purchased, November 21st, 1888.

Enlarged, 1888-89.

Class Rooms, Six.

Janitor, MRS. JAMES COZINE, 34 Coe's place.

## MORTON STREET.

Location, Morton street, corner Broome.

Erected, 1851.

Opened, November 24th, 1851.

Enlarged, 1861, 1869, 1881.

Class Rooms, Twenty-one.

Janitor, JOHN F. PATZ, 91 Broome street.

## BROOME STREET.

Location, Broome street, corner Baldwin.

Rented.

Opened, November 16th, 1893.

Class Rooms, Three.

Janitor, ERNEST BIEHL, 155 Baldwin street.

## COURT STREET.

Location, Court street, corner Broome.

Rented.

Opened, December 10th, 1894.

Closed, July 1st, 1895.

Reopened, November 1st, 1895.

Class Rooms, Two.

Janitor, FREDERICK BANK, 205 Court street.

## MONMOUTH STREET.

Location, Monmouth st., bet. Spruce and Montgomery.

Erected, 1886-87.

Opened, May 2d, 1887.

Class Rooms, Sixteen.

Janitor, WILLIAM OVERGNE, 26 Miller street.

## LAWRENCE STREET.

Location, Lawrence street, foot of Clinton.

Erected, 1872-73.

Opened, September 1st, 1873.

Remodeled, 1890.

Class Rooms, Twelve.

Janitor, WM. WIGGINS, 22 Cherry street.

## COMMERCE STREET.

Location, Commerce street, east of Lawrence.

Erected, 1846-47.

Opened, September, 1880.

Class Rooms, Six.

Janitor, SAMUEL R. CARR, 127½ Commerce street.



## COLORED.

Location, rear of Commerce street building.

Erected, 1860.

Enlarged, 1868.

Opened, as a Colored School, 1874.

Class Rooms, Four.

Janitor, SAMUEL R. CARR, 127 $\frac{1}{2}$  Commerce street.

## CHESTNUT STREET.

Location, Chestnut street, near Mulberry.

Erected, 1859-60.

Opened, September 24th, 1860.

Enlarged, 1870.

Class Rooms, Sixteen.

Janitor, JACOB CONLEY, 20 Scott street.

## LAFAYETTE STREET.

Location, Lafayette street, corner Prospect.

Erected, 1848-49.

Opened, July 27th, 1849.

Enlarged, 1863; 1870-71; 1881; 1884.

Class Rooms, Sixteen.

Janitor, JOHN J. GARTLAND, 378 Walnut street.

## SOUTH EIGHTH STREET.

Location, South Eighth street, near Central avenue.

Erected, 1872-73.

Opened, September 1st, 1873.

Class Rooms, Twelve.

Janitor, ARTHUR MCLEAVEY, 249 South Tenth street.

THIRTEENTH AVENUE.

Location, Thirteenth avenue, corner Richmond street.

Erected, 1887-88.

Opened, November 19th, 1888.

Enlarged, 1891-92.

Class Rooms, Seventeen.

Janitor, JOSEPH WINCKLHOFER, 149 Thirteenth avenue.

CENTRAL AVENUE.

Location, Central avenue, near Newark street.

Erected, 1871-72.

Opened, September, 1872.

Class Rooms, Fourteen.

Janitor, FREDERICK GOESS, 262 Central avenue.

LOCK STREET.

Location, Lock street, between Central and Sussex aves.

Erected, 1866-67.

Opened, April, 1867.

Class Rooms, Four.

Janitor, CHARLES BROUGHTON, 87 South Orange avenue.

WARREN STREET.

Location, Warren street, between Wickliffe and Wilsey.

Erected, 1891-92.

Opened, September 12th, 1892.

Class Rooms, Eight.

Janitor, GARRET CONLON, 81 Wilsey street.

## WICKLIFFE STREET.

Location, Wickliffe street, corner School.

Erected, 1848-49.

Opened, as a Grammar School, 1849.

Opened, as a Primary School, September 1st, 1873.

Class Rooms, Six.

Janitor, ELIZABETH WALSH, rear of school.

## SUMMER AVENUE.

Location, Summer avenue, near Second.

Erected, 1883-84.

Opened, September 5th 1884.

Class Rooms, Twelve.

Janitor, GOTTFRIED BIEBER, 62 Seabury place.

## ELLIOT STREET.

Location, Elliot street, corner Summer avenue.

Erected by Woodside Township.

[Woodside annexed, April 5, 1871.]

Opened, September, 1871.

Rebuilt, 1881.

Enlarged, 1890 : 1895-96.

Class Rooms, Fourteen.

Janitor, MILES I. COEYMAN, 730 Summer avenue.

## RIDGE STREET.

Location, Ridge street, near Montclair avenue.

Opened, September 10th, 1894.

Purchased, December 6, 1895.

Class Rooms, Four.

Janitor, ISAAC E. RAMSEN, 644 Summer avenue.

## MILLER STREET.

Location, Miller street, near Sherman avenue.

Erected, 1880-81.

Opened, June 1st, 1881.

Enlarged, 1887-88.

Class Rooms, Fourteen.

Janitor, CHARLES GRIFFITHS, 61 Vanderpool street.

## ELIZABETH AVENUE.

Location, Elizabeth ave., bet. Stanton and Bigelow sts.

Erected by Clinton Township.

[Part Clinton Township annexed.]

Opened, September 1st, 1869.

Closed, June 1st, 1881.

Reopened, April 4th, 1892.

Enlarged, 1895.

Class Rooms, Six.

Janitor, JOHN W. MOORE, 35 Avon avenue.

## CHARLTON STREET.

Location, Charlton street, corner Waverly place.

Erected, 1895.

Opened, September 9th, 1895.

Class Rooms, Eight.

Janitor, ADOLPH SAUPE, 18 Clayton street.

## OLIVER STREET.

Location, Oliver street, near Pacific.

Erected, 1869.

Opened, September 6th, 1869.

Class Rooms, Fourteen.

Janitor, EMIL KOLLER, 56 Pacific street.

SOUTH STREET.

Location, South street, corner Hermon.

Erected, 1883-84.

Opened, September 5th, 1884.

Class Rooms, Twelve.

Janitor, EDWARD E. KIERNAN, 102 Tichenor street.

WALNUT STREET,

Location, Walnut street, near Jefferson.

Erected, 1862.

Opened, January, 1863.

Remodeled, 1877.

Class Rooms, Eight.

Janitor, EDWARD DELANEY, 220 Walnut street.

ANN STREET.

Location, Ann st., bet. New York ave. and Elm road.

Erected, 1891-92.

Opened, September 12th, 1892.

Class Rooms, Eight.

Janitor, THOMAS H. DILLON, 61 Napoleon street.

NORTH SEVENTH STREET. (New.)

Location, North Seventh street, near Fifth avenue.

Erected, 1893-94.

Opened, September 10th, 1894.

Class Rooms, Eight.

Janitor, GEORGE H. SCHNARR, 185 Fourth street.

## NORTH SEVENTH STREET. (Old.)

Location, North Seventh street, rear of new building.

Erected, 1860, on Roseville avenue site.

Removed, 1874, to North Seventh street.

Removed, 1893, to its present location.

Opened, September 6, 1874.

Class Rooms, Six.

Janitor, GEORGE H. SCHNARR, 185 Fourth street.

## ROSEVILLE AVENUE.

Location, Roseville avenue, near Orange street.

Erected, 1883-84.

Opened, April 16th, 1884.

Class Rooms, Six.

Janitor, JAMES QUINN, 50 Bergen street.

## SOUTH MARKET STREET.

Location, South Market street, corner Mott.

Erected, 1855-56.

Opened, May 4th, 1857.

Class Rooms, Twelve.

Janitor, MICHAEL CLARK, 13 Clover street.

## HAMBURG PLACE.

Location, Hamburg place, near Ferry street.

Erected, 1881-82.

Opened, April 10th, 1882.

Enlarged, 1885-86.

Class Rooms, Fourteen.

Janitor, MRS. MARGARET WECKENMANN, 23 Wall street.



## HAMBURG PLACE ANNEX.

Location, 29 Hamburg place.

Purchased, August 16th, 1892.

Opened, January 6th, 1896.

Class Rooms, Four.

Janitor, MRS. MARGARET WECKENMANN, 23 Wall street.

## HAWKINS STREET.

Location, Hawkins street, near Ferry.

Erected, 1887-88.

Opened, January 3d, 1889.

Class Rooms, Eight.

Janitor, WM. BAUMGARTNER, 29 Brill street.

## SOUTH TENTH STREET.

Location, South Tenth street, corner Blum.

Erected, 1870.

Opened, January 2d, 1871.

Enlarged, 1879; 1888-89.

Class Rooms, Fourteen.

Janitor, NICHOLAS MORGENSTERN, 549 South Eleventh street.

## CAMDEN STREET.

Location, Camden street, near Sixteenth avenue.

Erected, 1883-84.

Opened, September 5th, 1884.

Class Rooms, Twelve.

Janitor, JACOB KERN, 302 Camden street.

## WAVERLY AVENUE.

Location, Waverly avenue, bet. Bergen and Kipp streets.

Erected, 1891-92.

Opened, October 20th, 1892.

Class Rooms, Eight.

Janitor, JOHN LIND, 130 Barclay street.

## FIFTEENTH AVENUE.

Location, Fifteenth avenue, corner Fifteenth street.

Erected, 1895.

Opened, September 9th, 1895.

Class Rooms, Eight.

Janitor, LOUIS VONDERWERTH, 469 South Fifteenth street.

## NEWTON STREET.

Location, Newton street, near South Orange avenue.

Erected, 1866-67.

Opened, September, 1867.

Enlarged, 1868.

Burned, June, 1871.

Rebuilt, September-October, 1871.

Enlarged, 1873.

Class Rooms, Seventeen.

Janitor, JOSEPH SCHUCK, 488 Springfield avenue.

## EIGHTEENTH AVENUE.

Location, Eighteenth avenue, corner Livingston street.

Erected, 1871.

Opened, September, 1871.

Class Rooms, Nineteen.

Janitor, JOSEPH MESMER, 135 Livingston street.

## LIVINGSTON STREET.

Location, Livingston street, near Eighteenth avenue.

Rented.

Opened, February 1st, 1894.

Class Rooms, Four.

Janitor, JOSEPH MESMER, 135 Livingston street.

## "FRANKLIN" SCHOOL.

Location, Fifth avenue, corner Cutler street.

Erected, 1889.

Opened, September 16th, 1889.

Enlarged, 1895.

Class Rooms, Sixteen.

Janitor, GEORGE W. JANIFER, 190 Ridge street.

## INDUSTRIAL SCHOOLS.

## JAMES STREET.

Location, No. 8 James street.

Class Rooms, Four.

Janitor, ALEXANDER SMALL, 13 First street.

## CLOVER STREET.

Location, Clover street, near Merchant.

Class Rooms, Two.

Janitor, RICHARD SLAVIN, 101 Main street.

These buildings are owned by corporations, from whom the Board rents school rooms.



SCHOOL DIRECTORY.  
TEACHERS.





# SCHOOL DIRECTORY.

## TEACHERS.

NAME.	SCHOOL.	RANK.	ADDRESS.
Aber, Laura E. ....	Marshall St. P...	Assistant..	29 N. Center st., Or'ge
Adams, Alvia C. ....	South 8th St. G...	1st Ass'nt.	29 Ninth ave.
Adams, Myra W. ....	Webster St. P....	Assistant..	144½ Fourth ave.
Albertson, Lulu B. ....	Summer Ave. P.	H'd Ass'nt.	233A Garside st.
Aitken, Isabel J. ....	Elizabeth Ave. P.	Assistant..	44 Prospect st., E.Or.
Allen, Jane E. ....	Washington St. G.	V. Prin'pal.	24 Franklin st.
Alyea, Cornelia L. ....	Lawrence St. P...	Assistant..	3 Eighth ave.
Ames, Mrs. Mary M. ....	13th Avenue G...	"	323 Summer ave.
Anderson, Anna. ....	Camden Street P.	"	5 Gillette pl.
Anderson, Henry S. ....	Lawrence St. G...	Principal...	193 South Sixth st.
Andrew, Mary A. ....	Burnet Street P...	Assistant..	19 Warren pl.
Anthony, Lizzie. ....	Warren Street P.	"	32½ Webster st.
Antz, Natalie ....	High....	3d Ass'nt..	452 Clinton ave.
Arbuckle, Jennie M. ....	Lafayette St. P...	Assistant..	283 High st.
Arndt, Elizabeth K. ....	North 7th St. G...	V. Prin'pal.	105 North Seventh st.
Avery, Sarah A. ....	Central Ave. G...	Assistant..	122 Halsey st.
Badgley, Nellie M. ....	Newton Street P.	Assistant..	7 Linden st.
Bailey, Ida M. ....	Lafayette St. G...	"	237 Mulberry st.
Baird, Ada E. ....	18th Avenue P...	"	281½ Belleville ave.
Baird, Margaret. ....	18th Avenue G...	V. Prin'pal.	102 Sherman ave.
Baird, Margaret J. ....	Newton Street G.	1st Ass'nt.	204 Plane st.
Balcom, A. G. ....	"Franklin" G....	Principal .	167 Mt. Prospect ave.
Baldwin, Anna A. ....	Newton Street P.	Assistant..	27 Bathgate pl.
Baldwin, E. Belle. ....	Morton Street P.	"	171 Fourth ave.
Baldwin, Emma F. ....	Hamburg Place G.	V. Prin'pal.	23 Warwick st.
Baldwin, Lucasta C. ....	North 7th St. P...	Assistant..	37 Myrtle ave.
Baldwin, M. Lillian. ....	Chestnut St. G...	"	71 Pennsylvania ave.
Ball, Hattie E. ....	18th Avenue P...	"	139 Monmouth st.
Barnard, Charlotte R. ...	Normal & Train'g Training Dep't.	"	63 Astor st.
Barth, Annie. ....	Charlton St. P...	"	105 Monmouth st.
Bassett, May V. ....	Summer Ave. P...	"	57 Halleck st.
Baxter, Anna W. ....	Webster Street P.	"	183 Mt. Prospect ave.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Baxter, James M. ....	Colored . . . . .	Principal . .	15 Elm st.
Bayley, Eva E. ....	So. Market St. P. .	Assistant . .	29 Lafayette st.
Beach, Della W. ....	Central Avenue P. .	" . .	113 Plane st.
Beam, Sarah E. ....	Oliver Street G. . .	1st Ass'nt. .	327 Summer ave.
Beardsley, Emma E. ....	Chestnut St. G. . .	" . .	15 South st.
Bedell, Mary E. ....	South Street P. . .	H'd Ass'nt. .	37 Chestnut st.
Belcher, Elizabeth H. ....	Waverly Ave. P. . .	Principal . .	Clinton av., W., Irv'g'n
Belcher, Katharine F. ....	Charlton Street P. .	Assistant . .	90 Clinton ave.
Beltaire, Annie L. ....	Morton Street P. .	" . .	33 Morton st.
Bennett, Bessie C. ....	Ridge Street P. . .	" . .	128 Sylvan ave.
Bennett, Laura J. ....	Burnet Street G. . .	1st Ass'nt. .	114 Orange st.
Bennett, Mary E. ....	13th Avenue P. . .	Assistant . .	98 Central ave.
Bensen, Carrie W. ....	So Market St. G. . .	1st Ass'nt. .	26 Hill st.
Berry, Arisena. ....	Monmouth St. P. . .	Assistant . .	287 Charlton st.
Berry, Estelle V. ....	Elizabeth Ave. P. .	H'd Ass'nt .	287 Charlton st.
Betts Margaret E. ....	Elliot Street P. . .	Assistant . .	35 Clark st.
Beyer, Augusta M. H. ....	High Annex, Girls .	3d Ass'nt. .	770 Summer ave.
Biggin, Mrs. Elizabeth T. .	Clover Street Ind. .	Assistant . .	332 Elm st.
Bingham, Cora E. ....	Miller Street P. . .	" . .	90 Wright st.
Bingham, Lizzie M. ....	Wickliffe Street P. .	V. Prin'pal .	26 Newton st.
Bird, Mary R. ....	Lafayette St. P. . .	Assistant . .	113 Bruen st.
Bissell, Wm. E. . . . .	Burnet Street G. . .	Principal . .	299 High st.
Blake, K. S. A. B., A. M., Ph. D.	High Annex, Boys .	1st Ass'nt. .	768 Highland ave.
Bogan, Margaret A. ....	Hawkins Street P. .	Assistant . .	13 Hawkins st.
Bolton, Amy L. ....	Elliot Street P. . .	" . .	25 Taylor st.
Bowers, Ida. ....	Monmouth St. P. . .	V. Prin'pal .	343 Washington st.
Bowlby, Elizabeth. ....	Burnet Street P. . .	Assistant . .	137 Bloomfield ave.
Boylan, Madeleine. ....	Camden Street P. .	" . .	502 Summer ave.
Brackin, M. Fannie. ....	"Franklin" P. . . .	" . .	24 Mt. Prospect ave.
Bradford, Mary A. ....	Elliot Street P. . .	" . .	23 Wakeman ave.
Branum, Sarah N. ....	Chestnut St. G. . .	1st Ass'nt. .	12 Court st.
Bristol, Kate L. ....	South 8th St. G. . .	Assistant . .	24 Bathgate pl.
Brookfield, Eliza A. ....	State Street P. . . .	Principal . .	100 Central ave.
Brown, M. Florence. ....	Morton Street P. . .	Assistant . .	80 Hillside ave.
Buchanan, Fannie L. ....	Lawrence St. G. . .	1st Ass'nt. .	201 Mt. Pleasant ave.
Buehler, Annie J. ....	Hamburg Place P. .	Assistant . .	81 Oxford st.
Burgyes, Annie S. ....	North 7th St. G. . .	" . .	24 Gould ave.
Burgyes, Edith. ....	Camden Street P. .	" . .	24 Gould ave.
Burnett, Mabel. ....	Camden Street P. .	" . .	112 Thirteenth ave.
Burnett, Priscilla. ....	13th Avenue P. . .	" . .	112 Thirteenth ave.
Burns, Mary C. ....	Lafayette St. P. . .	" . .	36 Elm st.
Burritt, Eva Egerton. . . .	Chestnut St. P. . .	" . .	27 Brunswick st.
Burtchaell, Florence M. . .	Waverly Ave. P. . .	" . .	15 Plum st.
Bush, Ida J. ....	Lock Street P. . . .	" . .	23 Warwick st.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Butler, Emma M. ....	Warren Street P.	Assistant..	435 High st.
Buttle, Irene M. ....	Lafayette St. G...	"	29 Franklin st.
Büttner, Marie. ....	High. ....	Teacher in charge of German..	182 Main st., E.Or'ge.
Camden, Marian D. ....	Burnet Street P.	V. Prin'pal.	56 Park pl.
Canfield, Jennie B. ....	Central Ave. G...	1st Ass'nt.	27 Burnet st.
Carter, S. Fannie. ....	Walnut Street P.	Principal ..	38 Park st.
Cashion, Genevieve A....	Court Street P...	Assistant ..	29 Morton st.
Cashion, Lillian I. ....	Morton Street P.	"	29 Morton st.
Caufield, Mary L. ....	Lawrence St. G...	"	18 Tichenor st.
Chandler, Mabel. ....	North 7th St. P.	"	112 North Ninth st.
Chedister, Louise. ....	Morton Street P.	V. Prin'pal.	436 Washington st.
Chenoweth, Martha M...	Lock Street P...	Assistant ..	190 Orange st.
Christie, Emma C. ....	Lafayette St. G.	"	31 Lafayette st.
Clark, Joseph. ....	Normal & Train'g	Principal ..	48 East Kinney st.
Clark, Laura A. ....	Miller Street P...	Assistant ..	92 Miller st.
Clark, Mabel L. ....	18th Avenue P...	"	68 Hillside ave.
Clark, Mary F. ....	Hamburg Place G.	"	116 Bruen st.
Clark, Mildred L. ....	Chestnut St. P...	"	48 East Kinney st.
Clarke, Agnes B. ....	Hamburg Place P.	V. Prin'pal.	84 Treacy ave.
Coates, Harriet S. ....	Chestnut St. P...	Assistant ..	745 High st.
Coe, Cornelia S. ....	Commerce St. P.	V. Prin'pal.	46 Mt. Pleasant ave.
Coe, Florence M. ....	South Tenth St. P.	Assistant ..	239 Littleton ave.
Coe, Jessie D. ....	Newton Street G.	1st Ass'nt.	Nutley, N. J.
Coe, Jessie L. ....	Webster Street P.	Assistant ..	46 Mt. Pleasant ave.
Cogger, Cora F. ....	Roseville Ave. P.	"	10 South Twelfth st.
Coleman, Mary A. ....	Washington St. G.	"	45 Nelson pl.
Collard, Thomas T. ....	North 7th St. G.	Principal ..	21 Kearny st.
Cone, Anna G. ....	Newton Street G.	Assistant ..	237½ South Eighth st.
Conover, Margaret D. ....	Lawrence St. G...	"	45 Division pl.
Conselyea, Caroline. ....	Miller Street P...	"	93 Wright st.
Cook, Laura. ....	Central Ave. G...	"	69 Eighth ave.
Cooper, Rebecca. ....	South Tenth St. P.	H'd Ass'nt.	1001 Broad st.
Cornwell, Gertie L. ....	Marshall Street P.	Assistant ..	76 Wickliffe st.
Corson, D. B. ....	Ann Street P. ....	Principal ..	34 South Twelfth st.
Cory, Mrs. Catharine B...	James Street Ind.	"	39 Blecker st.
Cottrell, Katherine. ....	Burnet Street P.	Assistant ..	27 Lombardy st.
Coult, Eliza A. ....	Summer Ave. G.	"	58 Mt. Pleasant ave.
Coult, Hannah M. ....	High. ....	2d Ass'nt.	58 Mt. Pleasant ave.
Crane, B. Flora, Ph. M...	High. ....	1st Ass'nt.	1 Roseville ave.
Crane, Elizabeth K. ....	Broome Street P.	Assistant ..	95 West Kinney st.
Crane, Helen S. ....	Washington St. P.	"	95 West Kinney st.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Crane, H. Louise. ....	Camden Street P.	Assistant..	95 West Kinney st.
Crater, Mrs. Georgia B...	Marshall Street P.	V. Prin'pal	17 Court st.
Crosby, Esther J. ....	Burnet Street G...	"	35 Burnet st.
Curtis, Annie E. ....	"Franklin" P....	"	34 Evergreen pl., E.O.
Curtis, Clara I. ....	Miller Street P...	Assistant..	11 Parkhurst st.
Dana, Caroline R. ....	Monmouth St. P..	Assistant..	48½ Walnut st.
Day, Annie C. ....	Washington St. G.	"	28 Parkhurst st.
Day, Margaret A. ....	Washington St. G.	1st Ass'nt..	28 Parkhurst st.
Dean, G. Julia. ....	Morton Street G..	"	54 State st.
Dean, Hester B. ....	South 8th St. P...	Assistant..	256 North Seventh st.
Dean, Margaretta. ....	Roseville Ave. P.	"	256 North Seventh st.
Dean, M. Ida. ....	Morton Street G..	V. Prin'pal.	54 State st.
Dearie, Jean A. ....	Camden Street P.	Assistant..	136 Stone st.
Deidrick, Anna R. ....	South 8th St. P. .	"	321 South Tenth st.
Deidrick, Hortense. ....	South 8th St G...	"	321 South Tenth st.
Delaney, Margaret C. ....	Ann Street P ...	"	116 Bowery st.
Delano, Laura C. ....	Walnut Street P..	"	26 Hill st.
De Mott, Linda M. ....	Fifteenth Ave. P.	"	204 Plane st.
Dettmer, Juliet. ....	"Franklin" G....	"	185 Garside st.
Dey, Lurena. ....	Newton Street P.	H'd Ass'nt.	206 First st.
Dickerson, Laura F. ....	Colored. ....	Assistant..	250 Market st.
Dixon, Mabel W. ....	Thirteenth Ave. P.	"	564 High st.
Dodge, Ruth C. ....	Burnet Street G..	"	35 Burnet st.
Donnelly, Anna T. ....	Central Ave. G...	1st Ass'nt.	331 Seventh ave.
Donnelly, Mary M. ....	Burnet Street G..	Assistant..	331 Seventh ave.
Doremus, Eliza C. ....	Webster Street P.	"	44 Second ave.
Doremus, Jessie K. ....	Washington St. G.	"	44 Second ave.
Dougall, Elizabeth W. ....	Summer Ave. G..	1st Ass'nt.	208 South Sixth st.
Dougall, Mary A. ....	South 8th St. G...	V. Prin'pal.	208 South Sixth st.
Dougall, Wm. A., A. M..	South 10th St. P..	Principal ..	213 South Sixth st.
Dougherty, Henry J. ....	Eighteenth Ave. G	"	135 Badger ave.
Douglas, Martha C. ....	South 10th St. P..	Assistant..	59 Chester ave.
Dowie, Jennie M. ....	Lawrence St. P..	"	13 Elm st.
Drake, Belle. ....	South 10th St. P..	"	21 Center st.
Drew, Minnie I. ....	So. Market St. G.	"	255 South Eighth st.
Drummond, Adelaide. ....	Roseville Ave. P..	"	33 Myrtle ave.
Duffy, Grace M. ....	Morton Street P..	"	80 Wickliffe st.
Duncan, Lucy G. ....	Newton Street P.	"	102 Elm st.
Dunham, Mary E. ....	Waverly Ave. P..	"	65 Stratford pl.
Dunn, Agnes J. ....	Thirteenth Ave. P.	"	466 High st.
Dunn, Katharine F. ....	Thirteenth Ave. P.	V. Prin'pal.	466 High st.
Dunnell, Anna C. ....	South 8th St. P..	"	84 Linden av., Blm'f'd.
Durand, S. Eveline. ....	Eighteenth Ave. G	Assistant..	424 Washington st.



## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Dusenberry, Emily T.....	Eighteenth Ave. G	Assistant..	86 Orchard st.
Eagles, Annie McLeod....	Central Ave. P...	"	273 High st.
Egbert, Edna C.....	Morton Street G..	"	675 Bergen st.
Egner, Lena E.....	Fifteenth Ave. P.	"	1015 Broad st.
Elder, L. Louise.....	South 8th St. G..	"	96 South Eleventh st.
Ellis, Griselda.....	Camden Street P.	"	209 South Sixth st.
Ellyn, Lizzie.....	Lafayette St. P...	"	148 Washington st.
Elston, Lois F.....	Monmouth St. P..	"	156 Barclay st.
Enders, J. Virginia.....	Camden Street P.	H'd Ass'nt.	141 Bank st.
Eunson, Sarah A.....	Eighteenth Ave. P	Assistant..	139 Monmouth st.
Everding, Katherine A....	Ann Street P.....	"	435 High st.
Evers, Lula B.....	Monmouth St. P..	"	38 Webster st.
Farmer, Florence V.....	Walnut Street P..	"	15 Wakeman ave.
Fawcett, Sara A.....	Drawing Teacher.	Special...	481 Broad st.
Felts, Florence.....	Thirteenth Ave. P.	Assistant..	51 Howard st.
Field, Josephine A.....	High Annex, Girls	3d Ass'nt..	307 Belleville ave.
Fine, Carrie H.....	Central Ave. P...	Assistant..	26 Summit st.
Finter, Emma.....	Oliver Street P...	V. Prin'pal.	125 Prospect st.
Fithian, Emma I.....	Ann Street P.....	Assistant..	41 Pacific st.
Fitzgerald, Jennie B.....	Eighteenth Ave. P	"	182 Brunswick st.
Fletcher, Alice M.....	South 10th St. P..	V. Prin'pal.	183 Fairmount ave.
Force, Frances C.....	Camden Street P.	Assistant..	16 Thomas st.
Forman, George.....	Monmouth St. P..	Principal..	202 South Sixth st.
Forster, Millie A.....	High.....	1st Ass'nt.	50 Arlington av., E.O.
Fort, Fred. W. ....	Hamburg Place G.	Principal..	33 South Tenth st.
Foxcroft, Jennie I.....	State Street P...	Assistant..	13 Carteret st.
Freeman, H. Adra.....	Commerce St. P..	"	36 Taylor st.
Freeman, L. Edna.....	Oliver Street P...	"	81 New York ave.
Gaffy, Leonora R.....	Thirteenth Ave. P.	"	266½ Norfolk st.
Garabrant, Laurilla.....	Ann Street P....	"	33 Lafayette st.
Garrabrant, Anna L.....	" Franklin" G....	1st Ass'nt.	29 North Ninth st.
Gaston, Kate Z.....	North 7th St. G..	Assistant..	192 Roseville ave.
Gauch, Lizzie E.....	Elliot Street P...	"	147 Mt. Prospect ave.
Geissele, E. Elise.....	Hamburg Place P.	"	168 Polk st.
Gemar, Jennie A.....	Hamburg Place G.	1st Ass'nt.	203 Main st., E.Or'ge.
Geppert, Agnes C.....	Walnut Street P..	Assistant..	20 Mercer st.
Geraghty, Linda M.....	Morton Street G.	"	104 Bleecker st.
Geraghty, Mary.....	South Street P...	"	227 Mulberry st.
Giffin, Clarence S.....	Hawkins Street P.	Principal..	104½ Washington ave.
Gilman, F. G.....	High.....	1st Ass'nt.	774 Highland ave.
Gillott, Jessie.....	Central Ave. P...	Assistant..	32 Sixth ave.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Gillott, Mrs. M. Augusta.	Lock Street P. . .	V. Prin'pal.	32 Sixth ave.
Gleason, C. H. . . . .	Summer Ave. G. .	Principal .	104 Fourth ave.
Glover, Flora I. . . . .	So. Market St. G. .	Assistant.	70 South Twelfth st.
Gogl, Claribel. . . . .	" Franklin " G. . .	"	187 Broad st.
Gogl, Emma L. . . . .	Webster St. P. . .	"	187 Broad st.
Gore, Belle M. . . . .	" Franklin " G. . .	1st Ass'nt.	310 Summer ave.
Gould, Frances V. . . . .	South 8th St. P. . .	Assistant..	50 Ninth ave.
Graham, Ada. . . . .	Charlton St. P. . .	"	161 Somerset st.
Graham, Lucy. . . . .	Waverly Ave. P. .	"	161 Somerset st.
Greene, Clara W. . . . .	High. . . . .	V. Prin'pal.	17 West Park st.
Greenhalgh, Mary Abbie.	Eighteenth Ave. P	Assistant..	227 High st.
Grice, Edith E. . . . .	South 8th St. G. . .	"	443 Seventh ave.
Giggs, Mrs. Arthur. . . . .	Director of Music	Special. . . .	81 Halsey st.
Grill, Caroline L. . . . .	Newton Street P. .	Assistant..	211 Fairmount ave.
Grook, Genevieve S. . . . .	High Annex, Girls	3d Ass'nt..	274 Parker st.
Grover, Isabel G. . . . .	Washington St. P.	Assistant..	97 Court st.
Haddow, Agnes. . . . .	Hawkins Street P.	"	109 $\frac{1}{2}$ Bloomfield ave.
Haines, Alice B. . . . .	Fifteenth Ave. P. .	"	34 Franklin st.
Haines, Florence L. . . . .	Monmouth St. P. .	"	34 Franklin st.
Hall, Juliet N. . . . .	Ann Street P. . . .	"	246 South Eighth st.
Hallock, J. A. . . . .	Elliot Street <del>P. . .</del>	Principal . .	329 Summer ave.
Hamel, Georgiana. . . . .	Webster Street P	Assistant..	33 Dickerson st.
Hampton, Belle. . . . .	Newton Street P. .	"	351 Plane st.
Hancock, Phebe. . . . .	Lawrence St. G. . .	V. Prin'pal.	40 Columbia st.
Hand, Lydia W. . . . .	Morton Street G. .	Assistant..	Orange av., Irvington.
Hanson, F. H. . . . .	Washington St. G	Principal . .	141 Heller Parkway.
Hardin, Elizabeth. . . . .	High Annex, Girls	3d Ass'nt..	899 Broad st.
Haring, Florence A. . . . .	" Franklin " P. . . .	Assistant..	369 Summer ave.
Haring, Frances M. . . . .	Summer Ave. G. . .	"	174 Summer ave.
Harlow, Julia A. . . . .	Roseville Ave. P. .	"	61 Taylor st.
Hartpence, Leora A. . . . .	State Street P. . . .	"	33 Rector st.
Hartstall, Rose. . . . .	Normal & Train'g Training Dept	"	933 Broad st.
Hascall, Theodorus B. . . . .	High Annex, Boys	1st Ass'nt..	34 Hill st.
Haskell, Mary G. . . . .	" Franklin " P. . . .	Assistant..	5 Clay st.
Hatcher, Ida M. . . . .	Oliver Street G. . .	1st Ass'nt..	58 South Seventh st.
Haulenbeck, Caroline Y. . . . .	" Franklin " P. . . .	Assistant..	77 North Eleventh st.
Hay, Harriet E. . . . .	Livingston St. P. .	"	48 Gray st.
Healy, M. Adelaide. . . . .	Oliver Street G. . .	"	70 Brunswick st.
Healy, Ruth E. . . . .	Miller Street G. . .	"	70 Brunswick st.
Hegeman, Jeannette. . . . .	Charlton Street P. .	"	75 Avon ave.
Heineken, W. L., A. M. . . .	Charlton Street P.	Principal . .	202 Clinton ave.



## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Henderson, Annie.....	Hamburg Place G.	Assistant..	23 Chestnut st.
Hennion, Mary P.....	Summer Ave. P..	"	320 Belleville ave.
Henry, Belle.....	Morton Street P..	"	85 Wickliffe st.
Henson, Ellen A.....	Roseville Ave. P.	"	165 North Sixth st.
Herbst, Helen.....	Charlton Street P.	V. Prin'pal.	669 Hunterdon st.
Hevey, Agnes B.....	Eighteenth Ave. P.	Assistant..	45 Sixth ave.
Hill, Laura E.....	Camden Street P.	"	40 Nelson pl.
Hill, Lillie A.....	Camden Street P.	"	40 Nelson pl.
Hill, Nellie.....	High.....	2d Ass'nt..	81 North Ninth st.
Hilton, Mary L.....	South 10th St. P..	Assistant..	247 South Eighth st.
Hochkins, Carrie E.....	Fifteenth Ave. P.	"	253 South Eighth st.
Hochkins, Julia L.....	Lawrence St. P..	V. Prin'pal.	253 South Eighth st.
Hogan, Maud G.....	Warren Street P..	Assistant..	75 Warren st.
Holloway, Julia S.....	Washington St. G.	"	186 Washington st.
Hollum, Margaret.....	Central Avenue P.	V. Prin'pal.	175 James st.
Hoppaugh, Abbie J.....	Walnut Street P..	Assistant..	29 Cottage st.
Hopping, Susie C.....	Ann Street P....	V. Prin'pal.	207 Walnut st.
Horschel, Jeanette T.....	South 10th St. P..	Assistant..	249 Littleton ave.
Horn, Matilda.....	Monmouth St. P..	H'd Ass'nt.	66 Sherman ave.
Hovey, E. O., A. M., Ph. D.	High.....	Principal..	2 Lombardy st.
Howard, Anna M.....	Thirteenth Ave G.	Assistant..	180 Second st.
Howard, Marie N.....	Wickliffe Street P.	"	9 Orchard st.
Howell, Pamela.....	Summer Ave. G..	1st Ass'nt.	120 Third ave.
Hunt, Laura E.....	Morton Street P..	Assistant..	174 Bank st.
Hutchings, Carrie C.....	Walnut Street P..	H'd Ass'nt.	58 Hamilton st.
Hutchings, Emma L.....	Newton Street P.	V. Prin'pal.	South Orange, N. J.
Hutman, Florence E.....	James Street Ind.	Assistant..	31 Gillette pl.
Hymes, Sara L.....	So. Market St. P.	"	43 Clinton st.
Iliff, C. Blanche.....	Hamburg Place G.	"	26 Camp st.
Ingalsbe, Caroline A.....	Eighteenth Ave. P.	V. Prin'pal.	50 East Kinney st.
Issler, Emma A.....	Morton Street P..	H'd Ass'nt.	32 Nelson pl.
Jackson, Harriet G.....	Washington St. P.	Assistant..	88 Wakeman ave.
Jacobus, Edith M.....	Charlton Street P.	"	50 Milford ave.
Jenkinson, Harriet K.....	State Street P....	"	24 Baldwin st.
Johnson, Alice E.....	So. Market St. P..	V. Prin'pal.	96 Ridgewood ave.
Johnson, Alice I.....	Morton Street P..	Assistant..	21 Ninth ave.
Johnson, Caroline.....	Eighteenth Ave. G.	"	278 Academy st.
Johnson, Jane E.....	Normal & Train'g Normal Dep't.	V. Prin'pal.	19 Bathgate pl.
Johnson, Maude A.....	Burnet Street P..	Assistant..	Verona N. J.
Johnson, Mrs. M. Louisa..	James Street Ind.	"	18 S. Thirteenth st.
Jones, Laura.....	Hamburg Place P.	"	204 New st.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Joralemon, Rachel K.	Summer Ave. P.	Assistant.	265 Garside st.
Kaiser, Carrie A.	Camden Street P.	"	260 Fairmount ave.
Kayser, Charles F.	High.	1st Ass'nt.	52 Nelson pl.
Keene, Ednah J.	Monmouth St. P.	Assistant.	102 Warren st.
Kempe, Augusta.	Monmouth St. P.	"	132½ Court st.
Kempf, Emily M.	Thirteenth Ave. G.	V. Prin'pal.	112 Bleecker st.
Kennedy, J. Wilmer.	Miller Street G.	Principal.	3 Emmet st.
Kerns, M. Lizzie.	Burnet Street G.	1st Ass'nt.	21 Halsey st.
Kirk, Evelyn.	Commerce St. P.	Assistant.	Riverside ave.
Kirkpatrick, Mary D.	Ann Street P.	"	116 Prospect st.
Kitchell, Agnes.	Webster Street P.	Principal.	125 Broad st.
Kohl, Rosemary A.	South 10th St. P.	Assistant.	199 Morris ave.
Kreiner, Lillian M.	Lafayette Street P.	"	418 Plane st.
Kussy, Sarah.	Central Avenue P.	"	294 Springfield ave.
Law, Daisy M.	Oliver Street P.	"	24 Mulberry pl.
Lawrence, Mary.	Burnet Street G.	1st Ass'nt.	35 Nichols st.
Layland, Alice M.	Elliot Street P.	Assistant.	45 Eighth ave.
Layton, Julia N.	Miller Street P.	V. Prin'pal.	South Orange, N. J.
Leary, E. Theresa.	Lawrence St. P.	Assistant.	83 Columbia st.
Leary, Grace M.	Morton Street P.	"	83 Columbia st.
Leary, Margaret A.	Thirteenth Ave. P.	"	83 Columbia st.
Ledwith, Margaret J.	Elizabeth Ave. P.	"	180 Clinton ave.
Lehman, Minnie.	South Street P.	"	211 Thomas st.
Lenox, Margaret M.	Chestnut St. P.	"	19 Goble st.
Lewis, Minnie L.	So. Market St. P.	"	132 Boyden st.
Leyden, Eliza, Ph. M.	High.	1st Ass'nt.	371 Summer ave.
Littell, Bessie M.	Elliot Street P.	Assistant.	151 Garside st.
Lobdell, Lillie I.	State Street P.	"	73 Warren st.
Loeser, Ida.	Thirteenth Ave. P.	"	31 Nelson pl.
Loweree, Edith M.	Eighteenth Ave. P.	"	164 Summer ave.
Lowrie, Anna.	Normal & Train'g Training Dep't.	"	66 Brinkerhoff st., J.C.
Ludlow, L. Belle.	Oliver Street P.	"	43 Emmet st.
Luther, Agnes V.	Normal & Train'g	Teacher of Nat. Sci'ce	29 Walnut st.
Lutz, M. Anna.	North 7th St. P.	Assistant.	249 North Sixth st.
MacGowan, Jessie E.	Marshall Street P.	"	516 High st.
Maclay, Mary E.	Oliver Street G.	"	312 Summer ave.
Maclure, David.	Chestnut Street G.	Principal.	Stanley ave., S. Or'ge.
Mains, Cecilia.	Eighteenth Ave. P.	Assistant.	101 Congress st.
Marlatt, Nettie A.	Hamburg Place P.	"	60 Pacific st.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Martin, Adelyn C.....	Chestnut Street G.	Assistant..	24 Astor st.
Martin, Edith O., Pd. M...	Hamburg Place G.	"	16 Oak st.
Martin, Isadora.....	So. Market St. P.	"	109 Orchard st.
Martin, S. May.....	Warren Street P.	V. Prin'pal.	16 Oak st.
Martin, May Axford.....	Oliver Street G.	Assistant..	112A Pennsylvania av.
Marvin, Amy H. ....	Miller Street P...	"	83 Vanderpool st.
Mathews, B. C., A. M....	High. ....	1st Ass'nt.	36 Kearny st.
May, Mona M.....	North 7th St. P.	Assistant..	53 Ninth ave.
McClelland, Annie H....	South 10th St. P.	"	163 Fairmount ave.
McClelland, Helena.....	Fifteenth Ave. P.	"	163 Fairmount ave.
McClure, Joanna M.....	Thirteenth Ave.G.	"	61 South Tenth st.
McClure, Rebecca.....	Newton Street G.	1st Ass'nt.	61 South Tenth st.
McCrea, Mary B.....	Chestnut Street P.	Assistant..	104 Thirteenth ave.
McDonald, Katherine....	Burnet Street P...	"	131 Plane st.
McDonald, Mary.....	Commerce St. P.	"	368 New st.
McDonald, Sarah E.....	Warren Street P.	"	11 Milton st.
McElhose, Harriet E....	Ann Street P....	"	28 Brill st.
McHugh, Abbie P.....	"Franklin" G...	V. Prin'pal.	162 Garside st.
McIntyre, Adelina.....	Colored.....	Assistant..	170 Plane st.
McKee, Jane E.....	South 10th St. P.	"	213 Fairmount ave.
McLaughlin, Emilie W...	Hawkins Street P.	"	193 Breintnall pl.
McLeod, Eunice A.....	Elliot Street <del>10</del>	V. Prin'pal.	66 Taylor st.
McNary, Sarah J.....	High.....	1st Ass'nt.	130 Pennsylvania ave.
McNeill, Mary A.....	North 7th St. P.	V. Prin'pal.	16 Gould ave.
Meeker, Sarah L.....	Lafayette St. P...	Assistant..	52 Frelinghuysen ave.
Melick, E. Louise.....	Waverly Ave. P.	V. Prin'pal.	551 High st.
Merry, Graee.....	Normal & Train'g Training Dep't.	Assistant..	19 Lombardy st.
Merry, Sara E.....	Normal & Train'g Training Dep't.	"	19 Lombardy st.
Meyer, Isabel.....	Fifteenth Ave. P.	"	25 Hayes st.
Mikels, Jessie B.....	"Franklin" G....	"	230 Garside st.
Millen, Emma.....	South 8th St. G...	"	73 Burnet st.
Miller, Adelaide D.....	Lock Street P....	"	137 Bank st.
Miller, Annie M.....	Chestnut Street P.	V. Prin'pal.	33 Orchard st.
Miller, Caroline D.....	Warren Street P.	Assistant..	137 Bank st.
Miller, Mattie M.....	Walnut Street P.	"	214 Mulberry st.
Mills, Lydia A.....	Lafayette St. G...	"	54 Elizabeth ave.
Milzeg, Marie R. E.....	Wickliffe Street P.	"	24 Newton st.
Mock, Kate E.....	Thirteenth Ave.G.	1st Ass'nt.	87 Wickliffe st.
Moore, Elizabeth.....	Eighteenth Ave.P.	Assistant..	96 Sherman ave.
Moore, Elizabeth N.....	Hamburg Place P.	"	41 Essex st.
Moore, Hannah.....	South Street P...	V. Prin'pal.	118 Miller st.
Moore, M. Alice.....	Miller Street G...	Assistant..	325 Summer ave.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Moore, Sarah C. . . . .	Oliver Street P. . . .	Assistant. .	41 Essex st.
Moorhouse, Mary J. . . . .	Lafayette St. G. . . .	H'd Ass'nt.	221 Mulberry st.
Morehouse, Carrie E. . . . .	Miller Street G. . . .	Assistant. .	70 Murray st.
Morgan, Emma . . . . .	Newton Street G. . . .	1st Ass'nt.	18 Mercer st.
Morgan, Maria E. . . . .	Central Avenue G. . . .	V. Prin'pal.	122 North Sixth st.
Morris, M. Jennie. . . . .	Miller Street G. . . .	1st Ass'nt.	132 Pennsylvania ave.
Morrison, Ida J. . . . .	Summer Ave. G. . . .	Assistant. .	8 Wakeman ave.
Mullison, Harriet W. . . . .	Clover Street Ind. . . .	"	145½ Elizabeth ave.
Murphy, Eliza. . . . .	Summer Ave. G. . . .	V. Prin'pal.	377 Summer ave.
Myer, Eva. . . . .	State Street P. . . .	"	342 Roseville ave.
Navatier, Theresa C. . . . .	Elizabeth Ave. P. . . .	Assistant. .	66 Avon pl.
Neal, Mrs. Mary A. . . . .	James Street Ind. . . .	"	73 Oriental st.
Nebinger, Mary G. . . . .	Chestnut Street G. . . .	"	504A Washington st.
Nichols, Kate. . . . .	Hawkins Street P. . . .	"	170 Mt. Prospect ave.
Nichols, Margaret A. . . . .	Wickliffe Street P. . . .	"	170 Mt. Prospect ave.
Nichols, Mary W. . . . .	Summer Ave. G. . . .	"	355 Summer ave.
Nicols, M. Elizabeth. . . . .	North 7th St. P. . . .	"	136 Fourth ave.
Noe, S. Elizabeth. . . . .	Chestnut St. P. . . .	"	3 Sherman ave.
O'Gorman, Mrs. Elizab'h K. . . . .	Summer Ave. P. . . .	"	104 Broad st.
Oliver, Hattie L. . . . .	Webster Street P. . . .	"	219 Garside st.
O'Rourke, Mary A. . . . .	Hamburg Place P. . . .	"	98 Washington st.
Ortland, Emma E. . . . .	Eighteenth Ave. G. . . .	"	43 West st.
Overgne, M. Theresa. . . . .	Monmouth St. P. . . .	"	26 Miller st.
Parker, Isabel A. . . . .	Burnet Street G. . . .	"	21 Halsey st.
Parker, Mary M. . . . .	South Street P. . . .	"	107 Thomas st.
Parmly, Elizabeth G. . . . .	North 7th St. P. . . .	"	161 Roseville ave.
Parmly, Maude. . . . .	Marshall St. P. . . .	"	161 Roseville ave.
Peal, Amelia E. . . . .	Thirteenth Ave. P. . . .	"	137 Court st.
Peck, Adelaide. . . . .	Miller Street G. . . .	1st Ass'nt.	122 Brunswick st.
Peer, E. Jane. . . . .	Eighteenth Ave. G. . . .	"	127 Arlington st.
Peters, Minnie L. . . . .	Wickliffe St. P. . . .	Assistant. .	50 Mt. Pleasant ave.
Pettit, Hattie L. . . . .	South 10th St. P. . . .	"	51 Fifth ave.
Phillips, Charlotte T. . . . .	South Street P. . . .	"	56 Sherman ave.
Pierson, Eliza H. . . . .	Lawrence St. G. . . .	"	221 Mulberry st.
Potter, S. Emily. . . . .	Washington St. P. . . .	V. Prin'pal.	51 Washington ave.
Prentiss, Lory. . . . .	Normal & Train'g Normal Dep't.	Teacher of Phys. Cul.	55 Thirteenth ave.
Price, Lillian L. . . . .	Morton Street G. . . .	Assistant. .	58 Court st.
Price, Mary H. . . . .	Monmouth St. P. . . .	"	357 Summer ave.
Pridham, K. Mildred. . . . .	Washington St. P. . . .	"	79 Murray st.



## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Putnam, Ella E. ....	High. ....	2d Ass't.	66 Oriental st.
Putnam, Adelaide G. ....	Newton Street P..	Assistant..	66 Oriental st.
Quinlan, Margaret G. ....	Elliot Street P. ....	"	506 Summer ave.
Rasch, Margaret A. ....	Eighteenth Ave. P.	"	167 Boyd st.
Reeve, Abby D. E. ....	Hawkins Street P.	"	48 Pennington st.
Reeve, Ella A. ....	Hamburg Place P.	"	85 Broad st.
Reeve, M. Emma. ....	Burnet Street G..	"	11 Linden st.
Reeve, Nellie E. ....	South Street P. ....	"	57 Sherman ave.
Reeve, Virginia R. ....	State Street P. ....	"	89 New st.
Reuck, S. Alberta. ....	State Street P. ....	"	102 Halsey st.
Rhodes, L. Maude. ....	State Street P. ....	"	115 Stone st.
Richards, Lucy A. ....	Elliot Street P. ....	"	464 Summer ave.
Richards, Mary E. ....	Hamburg Place P.	"	41 Essex st.
Richards, Mary H. ....	High. ....	2d Ass't.	21 Taylor st.
Richardson, Florence. ....	Warren Street P..	Assistant..	299 Washington ave.
Richardson, Marion. ....	Chestnut Street P.	"	13 Pennsylvania ave.
Righter, Marietta. ....	So. Market St. G.	"	68 Mt. Pleasant ave.
Roche, Kate. ....	Oliver Street G..	"	39 Chestnut st.
Rodamor, Elizabeth. ....	Walnut Street P..	"	99 Wright st.
Romaine, Mary E. ....	Miller Street G..	V. Prin'pal.	23 Chestnut st.
Rose, L. Hilda. ....	Livingston St. P..	Assistant..	86 Vanderpool st.
Ruckelshaus, Bertha L. ....	Thirteenth Ave. P.	"	168 Fairmount ave.
Rudd, Annie C. ....	Summer Ave. P..	"	114 Summer ave.
Russell, Sadie G..	Hamburg Place P.	"	13 Tichenor st.
Ryer, Gertrude E. ....	South 8th St. G..	1st Ass't.	14 Warren st.
Sandy, William C. ....	High. ....	"	374 High st.
Sargeant, Ada E. ....	" Franklin " P. ....	Assistant..	224 Clifton ave.
Sayre, Ann E. ....	Warren Street P..	Principal ..	368 Bank st.
Sayre, E. Louise. ....	" Franklin " P. ....	Assistant..	186 Belleville ave.
Sayre, Laura B. ....	Camden Street P.	V. Prin'pal.	7 Hollywood av., E.O.
Sayre, Mrs. Laura H. ....	Lawrence St. P..	Assistant..	2 Lombardy st.
Scarlett, Anna. ....	Warren Street P..	"	56 South Eleventh st.
Scarlett, Augustus. ....	South 8th St. G..	Principal ..	56 South Eleventh st.
Scarlett, Sarah B. ....	Roseville Ave. P.	"	56 South Eleventh st.
Schenck, Bessie C. ....	North 7th St. P..	Assistant..	70 South Eleventh st.
Schieck, Carrie D. ....	Waverly Ave. P..	"	94 State st.
Schulte, Otto H. ....	Morton Street G.	Principal ..	85 Hillside ave.
Schwab, Millicent. ....	Court Street P..	Assistant..	498 Washington st.
Sexton, E. K. ....	South Street P..	Principal ..	64 Ninth ave.
Shepard, Edwin. ....	Oliver Street G..	"	25 Osborne Ter., C.T.
Sherman, Alton H. ....	High. ....	Assistant..	104 Cleveland st., Org.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Sherwood, Mrs. Isadore M.	High Annex, Girls	1st Ass't.	3 Linden st.
Simpson, Amy.....	" Franklin " G....	Assistant..	81 Broad st.
Sipp, Emma F.....	Chestnut Street G.	1st Ass't.	81 Orchard st.
Skinner, M. Adaline.....	South 10th St. P.	Assistant..	52 Lafayette st.
Smalley, Flora E.....	Newton Street G.	"	204 Fairmount ave.
Smalley, Nellie L.....	Chestnut Street G.	"	1001 Broad st.
Smith, Mrs. C. L. D.....	Lafayette St. G....	V. Prin'pal.	144 Monmouth st.
Smith, Edna S.....	Thirteenth Ave. P.	Assistant..	122 Wickliffe st.
Smith, Emma J.....	Chestnut Street G.	V. Prin'pal.	55 Emmet st.
Smith, Mrs. Fannie W....	Newton Street G.	"	122 Wickliffe st.
Smith, Ida E.....	Broome Street P.	H'd Ass't.	22 Richmond st.
Smith, Ida M.....	South Street P....	Assistant..	61 Lafayette st.
Smith, H. Isabel.....	" Franklin " P....	"	289 Broad st.
Smith, Leona C.....	Fifteenth Ave. P.	"	12 Chestnut st.
Sonn, George C.....	High.....	1st Ass't.	285 Belleville ave.
Sonn, Lydia K.....	Burnet Street P....	Assistant..	71 Belleville ave.
Speer, Agnes C.....	Morton Street P....	"	45 Astor st.
Speer, Matilda J.....	Eighteenth Ave. G.	"	45 Astor st.
Spencer, Mary B.....	Commerce St. P.	"	274 Mt. Pleasant ave.
Spinning, Maria L.....	Morton Street G.	1st Ass't.	33 Franklin st.
Squire, M. Irene.....	Monmouth St. P....	Assistant..	26 Nelson pl.
Steele, Fannie.....	Oliver Street G....	1st Ass't.	128 Monmouth st.
Steele, Susie.....	Oliver Street G....	V. Prin'pal.	128 Monmouth st.
Stein, Jennie B.....	Livingston St. P.	Assistant..	42 South Twelfth st.
Stephens, Carrie V.....	South 10th St. P.	"	58 Mt. Pleasant ave.
Stevens, M. Leonora....	Camden Street P.	"	432 Plane st.
Stickney, M. Ada.....	Morton Street P....	"	140 Wickliffe st.
Stites, Belle S.....	Lafayette St. P....	"	258 Clinton ave.
Stites, Dora A.....	Lafayette St. P....	V. Prin'pal.	258 Clinton ave.
Straus, Amelia.....	Broome Street P.	Assistant..	28 Central ave.
Stringer, Elizabeth M....	Washington St. G.	"	51 Avon ave.
Stumpf, Lillian.....	Charlton St. P....	"	34 Avon ave.
Sturgis, Emma M.....	State Street P....	"	198 Plane st.
Sullivan, Laura D.....	Central Ave. P....	"	291 North Seventh st.
Sutphen, Julia A.....	Miller Street G....	"	178 Brunswick st.
Sweasy, M. Augusta.....	Fifteenth Ave. P.	V. Prin'pal.	122 Wickliffe st.
Symons, Evelyn S.....	Oliver Street P....	Assistant..	184 Walnut st.
Taylor, Arthur V., A. B..	High Annex, Boys	1st Ass't.	148 North Sixth st.
Taylor, Fannie.....	Wickliffe St. P....	Assistant..	103 New st.
Taylor, Florence.....	South 8th St. P....	"	52 Roseville ave.
Taylor, George O. F.....	Central Avenue G	Principal..	241 Sixth ave.
Taylor, Sarah G. A.....	South 8th St. G....	Assistant..	34 Elizabeth ave.



## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Terwilliger, J. L.....	Newton Street G.	Principal ..	190 South Sixth st.
Thacher, C. S., C. E.....	High.....	1st Ass'tnt..	71 Kearny st.
Thomas, Emily B.....	Colored.....	Assistant..	170 Plane st.
Thompson, Hattie.....	Eighteenth Ave. G	"	102 Pennsylvania ave.
Thompson, Nellie B.....	Washington St. G.	1st Ass'tnt..	102 Pennsylvania ave.
Thurber, Lewis W.....	Lafayette St. G...	Principal ..	121 Third ave.
Tillard, Albertina G.....	Roseville Ave. P..	Assistant..	253 Roseville ave.
Titus, Ida M.....	North 7th St. P..	"	46 North Ninth st.
Todd, Mary A.....	Normal & Train'g Normal Dep't..	1st Ass'tnt..	644 Mt. Prospect ave.
Tompkins, Florence.....	Newton Street G.	Assistant..	37 Lincoln ave.
Townley, Elizabeth M....	Charlton St. P...	"	36 Emmet st.
Umbach, Minnie L.....	Miller Street G...	1st Ass'tnt..	Summit, N. J.
Urick, William P. B.....	So. Market St. G.	Principal ..	244 Lafayette st.
Utter, Ella D.....	So. Market St. P.	Assistant..	112 Green st.
Van Houten, Lizzie L....	Monmouth St. P.	"	84 Avon ave.
Van Houten, Sadie E....	Miller Street P...	"	35 Wright st.
Van Ness, E. May.....	Newton Street G.	"	169 Brunswick st.
Van Ness, Helen M.....	Monmouth St. P.	"	136 Monmouth st.
Van Nest, Harriet E....	Hamburg Place P.	"	222 Peshine ave.
Vieser, Susie H.....	Waverly Ave. P..	"	33 Holland st.
Virtue, May K.....	Central Avenue P.	"	125 Littleton ave.
Voget, Arnold.....	Camden Street P.	Principal ..	336 Waverly ave.
Von Seyfried, Sophie E...	High Annex, Girls	3d Ass'tnt..	70 Avon ave.
Vreeland, Mrs. Agnes A..	Central Avenue G.	Assistant..	43 Austin st.
Vreeland, M. Louisa.....	Normal & Train'g Training Dep't.	V. Prin'pal.	40 Brientnall pl.
Ward, Mary E.....	So. Market St. G.	"	91 South Tenth st.
Welcher, Carrie May.....	Walnut Street P..	Assistant..	246 Walnut st.
Westwood, Lulu.....	Ass't to Director of Music .....	Special....	40 Eighth ave.
White, Annie R .....	South 10th St. P..	H'd Ass'tnt.	24 Franklin st.
Whittemore, Mrs. Addie B.	Washington St. P.	Assistant..	17 Court st.
Widmer, Josephine A....	Hamburg Place G.	"	21 Hillside ave.
Widmer, M. Evelyn.....	South 10th St. P..	"	21 Hillside ave.
Wiener, William.....	High Annex, Boys	1st Ass'tnt..	62½ Nelson pl.
Wiggin, Abbie E.....	High.....	2d Ass'tnt..	130 Pennsylvania ave.
Wilkins, Amelia A.....	So. Market St. P..	Assistant..	90 Broad st.
Williams, Emma R.....	Monmouth St. P..	"	38 Warren pl.
Willis, Grace A. ....	Summer Ave. P..	"	377 Summer ave.

## TEACHERS—CONTINUED.

NAME.	SCHOOL.	RANK.	ADDRESS.
Willis, Sarah H. ....	Ridge St. P. ....	Assistant..	739 Summer ave.
Willis, W. Spader. ....	Fifteenth Ave. P..	Principal ..	264 Fairmount ave.
Willoughby, Mabel A. . .	Waverly Ave. P..	Assistant..	104 Third st.
Wilson, Albert B. ....	Thirteenth Ave. G.	Principal ..	97 South Tenth st.
Wilson, Helen E. ....	South Street P. . .	Assistant..	228 Orange st.
Wilson, Susie M. ....	Monmouth St. P.	"	40 Mercer st.
Wolf, Emma. ....	Lawrence St. G. . .	1st Ass't..	23 Court st.
Wood, Clara A. ....	Lafayette St. P. . .	Assistant..	38 Grove st.
Wood, Mrs. M. Ella. ....	Lawrence St. P. . .	"	148 Academy st.
Woodruff, May. ....	" Franklin " G. . .	"	50 Clay st.
Woodward, Emma F. ....	Morton Street P. .	"	32½ Emmet st.
Wrigley, Jennie. . . . .	Newton Street P.	"	11 Clay st.
Wyckoff, Elizabeth. ....	North 7th St. G. .	1st Ass't..	275 Sixth ave.
York, Flora. ....	Hawkins Street P.	Assistant..	Riverside ave.
Young, Amelia R. ....	Ridge Street P. . .	H'd Ass't..	78 Fourth ave.
Young, Annie May. ....	North 7th St. P. .	Assistant..	227 Roseville ave.
Young, Mary A. ....	Lafayette St. P. . .	"	295 East Kinney st.
Zahn, Clara. . . . .	Hawkins Street P.	H'd Ass't..	53 South st.

SALARIES.

## Schedule of Teachers' Salaries

ADOPTED NOVEMBER 30th, 1888.

TO TAKE EFFECT DECEMBER 1st, 1888.

REVISED JULY 25, 1890, AUGUST 28th AND NOVEMBER 27th, 1891,  
NOVEMBER 25, 1892, JUNE 30, OCTOBER 27 AND  
DECEMBER 29, 1893.

GRADE.	1st Year.	2d Year.	Maxim'm.
NORMAL AND TRAINING SCHOOL.			
Principal—Male.....			\$2,300 00
Normal Department—			
Vice-Principal—Female.....			1,300 00
First Assistant—Female.....			1,100 00
Training Department—			
Vice-Principal—Female.....	\$700 00		850 00
Assistant—Female.....	525 00	\$650 00	700 00
HIGH SCHOOL.			
Principal—Male.....			2,500 00
First Assistant—Male.....	1,400 00		2,000 00
Second Assistant—Male.....	1,200 00		1,300 00
Vice-Principal—Female.....			1,800 00
First Assistant—Female.....	900 00		1,200 00
Second Assistant—Female.....	900 00		1,000 00
Third Assistant—Female.....	800 00		900 00
Teacher in charge of full division			
Senior Class.....			1,500 00
Teacher in charge of German.....			1,500 00
GRAMMAR SCHOOLS.			
Principal—Male.....			2,000 00
Vice-Principal—Male.....	1,100 00		1,200 00
Vice-Principal—Female.....	900 00		1,000 00
†Head Assistant—Female.....			800 00
†First Assistant—Female.....			750 00
Assistant—Female.....	475 00	600 00	*650 00

## SCHEDULE OF TEACHERS' SALARIES—CONTINUED.

GRADE.	1st Year	2d Year.	Maxim'm.
PRIMARY SCHOOLS.			
Principal—Male .....	.....	.....	\$1,500 00
Principal—Male (more than 12 classes) .....	.....	.....	1,800 00
Principal (6 classes and upwards)— Female.....	.....	.....	1,000 00
Principal (less than 6 classes)—Female .....	.....	.....	850 00
Vice-Principal—Female.....	\$700 00	.....	800 00
Head Assistant—Female.....	.....	.....	700 00
Assistant—Female .....	475 00	\$600 00	*650 00
INDUSTRIAL SCHOOLS.			
Principal (4 classes and upwards) — Female.....	.....	.....	800 00
Principal (less than 4 classes)—Female .....	.....	.....	700 00
Assistant—Female .....	475 00	600 00	*650 00
COLORED SCHOOL.			
Principal—Male .....	.....	.....	1,500 00
Assistant—Female ..	475 00	600 00	*650 00
SPECIAL.			
Drawing Teacher—Female.....	.....	.....	1,500 00
Director of Music.....	.....	.....	1,500 00
Assistant to Director of Music.....	.....	.....	800 00
†Temporary Assistant.....	3 months	4 months	3 months
(Grammar and Primary depart- ments—Female .....	at \$35 00	at \$40 00	at \$45 00

## EVENING HIGH SCHOOL.

Principal—Male.....	\$70.00 per month
Vice-Principal .....	60.00 per month
Assistants, at rate of.....	60.00 per month

## EVENING SCHOOLS.

Principal—Male.....	\$60.00 per month
Vice-Principal .....	45.00 per month
Assistants—Male or Female.....	\$40.00 and \$45.00 per month

## EVENING DRAWING SCHOOL.

Principal—Male.....	\$650.00 per year
Assistants—Male. ....	\$2.50 and \$3.00 per evening

## SCHEDULE OF TEACHERS' SALARIES—CONTINUED.

## SUBSTITUTES.

High School—Male.....	\$4.00 per day
High School—Female.....	2.50 per day
Grammar Department—Male.....	3.00 per day
Grammar and Primary Departments—Female.....	1.50 per day
Evening High School.....	\$2.00 per evening
Evening School.....	1.00 per evening

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NOTE—No special salary now paid shall be reduced by reason of this Schedule.

†First Assistants and Head Assistants, teaching classes of the highest grade, shall receive \$900 per year while teaching such grade.

‡Assistants must serve one year as temporary or probationary teachers, upon the completion of which, if satisfactory, they shall enter upon the first year of the permanent grade.

\*The maximum salary to be specially granted in each case upon a certificate of the Principal of the school where such an Assistant shall be teaching, said certificate to be endorsed by the City Superintendent.



MANUAL OF INSTRUCTION  
AND  
COURSE OF STUDY.



# MANUAL OF INSTRUCTION.

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## PRIMARY AND GRAMMAR GRADES. ARITHMETIC.

Every operation in Arithmetic must depend upon one or more of the processes known as the "Fundamental Rules."

The art of numbers is the right application of these rules.

The object of teaching Arithmetic is two-fold: first, to train pupils to a rapid and accurate expression (oral and written) in the fundamental operations; and second, to lead them to apply, in the field of business computations, the knowledge gained.

The art of abstract computation is essentially the work of the Primary Grades, and it is not to be considered as acquired until a rapid and accurate use of numbers in the mechanical processes is attained.

The child must be trained by the use of objects to see the effect of combining and separating numbers, then to memorize the results as abstract facts; hence, in the First Year's work, he learns to count objectively, that he may see what numbers represent, and then to memorize the numbers counted. In his first additions or combinations of simple numbers, the teacher shows the processes and results by using objects until these become fixed in the mind. As soon as this point is gained, the child should be led to think the process or combination, and to do similar operations mentally.

### TABLE WORK.

In the study of the Tables it will be found best to have the numbers so arranged that the answers will not appear in the order of arithmetical or geometrical progression.

Teach the names and uses of the signs. In all written work insist upon neatness and orderly arrangement.

Require pupils to make good figures.

*Do not continue the use of objects when the necessity for them no longer exists.*

The suggestions, drills and exercises appended hereto, are intended to develop a facility in the use of numbers that will insure to the pupils *expertness* in their work. In business life, accuracy and quickness in the use of figures are indispensable.

## NOTATION AND NUMERATION.

Teach by periods, not by the orders of the figures.

### COUNTING.

*First*, by ones, using objects. Teach how to make the numbers represented; then by ones, with abstract numbers.

*Second*, by tens to 101, beginning at ten; then by tens, beginning at any digit.

*Third*, by fives to 101.

*Fourth*, by twos, beginning at 2; then by twos, beginning at 1.

*Fifth*, by threes, beginning at 3; by threes, beginning at 2; by threes, beginning at 1.

This work continued with all the other digits.

### ADDITION TABLES.

TABLE A.	One half of a table should be written on the
1 + 0 =	blackboard (by the teacher) with the sums ex-
1 + 5 =	pressed. The children should copy this table on
1 + 9 =	their slates for busy work.
1 + 2 =	At the recitation exercise the answers are to be
1 + 8 =	erased and the pupils required to supply the results.
1 + 3 =	This prevents counting and makes the exercise one
1 + 7 =	of memory.
1 + 4 =	Continue these recitations until the table can be
1 + 6 =	recited as fast as the pupils can read, then more of
1 + 1 =	the table should be given until the whole is learned.
	Other tables are developed in the same manner.

Review each day the tables previously learned. After the tables are learned, have daily drills like the following:

TABLE B.

1

8

2

6

Have tables recited by adding the same digit to each number in the column until all the digits have been used.

9

4

These tables to be drilled upon until great rapidity is attained.

7

3

0

5

## COMBINATIONS.

READ AT SIGHT.

Example 1:

9	19	29	39	4	4	69	4	89	4
<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>49</u>	<u>59</u>	<u>4</u>	<u>79</u>	<u>4</u>	<u>99</u>
13	23	33	43	53	63	73	83	93	103

Example 2:

8	6	28	6	48	6	68	6	88	6
<u>6</u>	<u>18</u>	<u>6</u>	<u>38</u>	<u>6</u>	<u>58</u>	<u>6</u>	<u>78</u>	<u>6</u>	<u>98</u>

Example 3:

7	17	27	5	5	57	5	77	5	97
<u>5</u>	<u>5</u>	<u>5</u>	<u>37</u>	<u>47</u>	<u>5</u>	<u>67</u>	<u>5</u>	<u>87</u>	<u>5</u>

Teach that the sum of any two numbers (Ex. 1) whose unit figures are 9 and 4, will be a number whose unit figure is 3; so in all combinations of these figures, the sum will be the next higher number having 3 for its unit figure.

In all additions of two numbers, the unit figure of that sum will be the same as the sum of the two unit figures of the combination. Drill on similar tables.

## SUBTRACTION.

$6+?=15$	$15-8=$	$15-6=?$
$10+?=19$	$19-9=$	$10-6=?$
$2+?=10$	$11-7=$	$6-6=?$
$6+?=111$	$6-2=$	$14-6=?$
$9+?=17$	$14-8=$	$7-6=?$
$7+?=13$	$17-9=$	$11-6=?$
$4+?=12$	$10-6=$	$12-6=?$
$1+?=10$	$13-5=$	$8-6=?$
$3+?=7$	$9-8=$	$13-6=?$
$0+?=18$	$16-10=$	$6-0=?$
$5+?=13$		

Have tables similar to the above recited until pupils are proficient in them.

Subtraction is readily taught by applying the principle contained in the following axiom:

If two numbers are equally increased, their difference remains the same.

Example: Required the difference between 8,327 and 4,368:

$$\begin{array}{r}
 8,327 \\
 4,368 \\
 \hline
 3,959 \text{ Ans.}
 \end{array}$$

Adding 1 unit of the next higher order to the 7 in the minuend, makes 17 units; 17 units—8 units=9 units; adding 1 ten to the 6 tens in the subtrahend makes 7 tens; 12—7=5; 13—4=9; 8—5=3.

## MULTIPLICATION.

Construct a table similar to "Table B" in Addition, using the numbers 0 to 12, inclusive.

Have this table recited rapidly by taking any one of the numbers as a multiplier. Continue this drill throughout the



Third Year's Course. When a proper degree of proficiency is attained, require pupils to add to each product any one of the nine digits.

Apply the knowledge gained in table work to examples having four or five figures in the multiplicand. To illustrate: suppose the class has learned the table of 2 to six times; then the multiplicand should have 5 as its highest figure. Teach how partial products are arranged, and have the multiplier consist of two or more figures, as 21, 22, 201, 102, 222, etc.

Continue this application of the tables as fast as they are learned. Require, at sight, the product of any number of two figures by one of one figure.

### DIVISION.

Have the tables of multiples arranged promiscuously, and these tables recited as in multiplication.

$24 \div 2 = ?$	$23 \div 2 = ?$	$19 \div 2 = ?$
2 "	9 "	15 "
12 "	22 "	16 "
6 "	8 "	0 "
25 "	20 "	10 "
3 "	4 "	18 "
13 "	5 "	14 "
7 "	11 "	16 "

Proceed to apply the tables to examples of five and six figures for a dividend as fast as the tables are learned.

Teach Short Division before Long Division. Teach the names of the different parts of an example, and have pupils able to find the third term, any two being given.

### LONG DIVISION.

The teaching of this branch of Arithmetic requires the greatest care. Pupils should be so thoroughly taught from the outset, to write the correct figures in the quotient, that they

will not find it necessary to erase any quotient figure after it is once written.

This depends upon their ability to multiply the two left hand figures of the divisor by any one of the digits without the aid of pencil.

Consider the product so-obtained as a subtrahend and compare it with the necessary figures of the dividend regarded as a minuehd. The right quotient figure is thus determined.

## OUTLINES FOR LESSONS IN COMMON FRACTIONS.

STEP 1.—To develop a clear idea of the *meaning* of the word *fraction*. Derived from a word meaning to *fracture* or to *break*. Illustrate uses of word *fracture*. When we fracture or break, or conceive it done, we necessarily have, in reality or idea, parts. Another word for *part* is *fraction*.

Now *lead* pupils to see that a fraction is a part, etc., etc.

Illustrate objectively.

Simple mental exercises in development of

$$(a) \quad \frac{1}{2}, \quad \frac{1}{4}, \quad \frac{1}{8}, \quad \frac{1}{16}, \quad \frac{1}{32}, \quad \frac{1}{64}$$

$$(b) \quad \frac{1}{8}, \quad \frac{1}{6}, \quad \frac{1}{9}, \quad \frac{1}{12}$$

Develop the definition.—“A fraction is one or more of the equal parts of anything.” Show the necessity for the word *equal*.

$$(c) \quad \frac{2}{4}, \quad \frac{3}{4}, \quad \frac{2}{8}, \quad \frac{3}{8}, \text{ etc.} \\ \frac{2}{6}, \quad \frac{3}{6}, \quad \frac{2}{9}, \quad \frac{3}{9}, \text{ etc., etc.}$$

Analyze fractions, *e. g.*,  $\frac{2}{4}$  means 2 of the 4 equal parts of anything, etc. Illustrate objectively.

STEP 2.—Mental concrete examples in review of Step 1. Pupils already know the *form* of a fraction. Have several fractions written and analyzed (see Step 1), and lead pupils to see that the *lower number* shows the *kind* or *size* of parts, and the upper number how many parts. Fractions written in this (the *usual* or *common*) form are *Common Fractions*

The *lower number* names the parts; *i. e.*, it is the “*namer*” or *denominator*.

The *upper number* numbers the parts ; *i. e.*, it is the “*num-berer*” or *numerator*.

STEP 3.—Review Steps 1 and 2.

When we wish to speak of *both* numerator and denominator we say *terms*.

Show that a fraction is an expression of division, and therefore the *value* of any fraction equals numerator divided by denominator.

Oral exercises, abstract and concrete, in finding value.

Written exercises, abstract and concrete, in finding value (*i. e.*, changing improper fractions to whole or mixed numbers.)

STEP 4.—Call attention to the fact that some fractions are *equal to or greater than* one, and others are *less* than one.

The first are fractions only in *form*—*i. e.*, not properly fractions—improper fractions. The others are fractions in reality—proper fractions.

What is a proper fraction ?

What is an improper fraction ?

What is a mixed number ?

When will an improper fraction equal a whole number ?

When will an improper fraction equal a mixed number ?

Why cannot a proper fraction equal either ? *etc.*, *etc.*

Do not make a stated study of effect upon the *value* of a fraction when the numerator or denominator, or both, are multiplied or divided by any number. Teach incidentally.

STEP 5.—Transformation of fractions (*Reduction* is incorrect.) Oral exercises, abstract and concrete, in changing to equivalent fractions in higher or lower terms. Recall meaning of word *terms*. Have pupils explain all processes in their own language, which will be logical if preceded by proper teaching.

STEP 6.—Review questions. Oral and written exercises, abstract and concrete, in changing fractions or whole numbers to equivalent fractions, *e. g.*, change  $\frac{2}{3}$  to 15ths, *etc.*; 8 to 10ths. Change  $\frac{1}{2}$  and  $\frac{3}{4}$  to 15ths, *etc.*

Explanation : since the required fraction is to be 15ths, its denominator must be 15, *i. e.*, 3, the given denominator, must be multiplied by 5. Hence the parts will be  $\frac{1}{5}$  as large, therefore we must take *5 times as many* to have the *same value*. Hence, we multiply the numerator by 5.

STEP 7.—Review Steps 5 and 6. Show that when we multiply *both terms* of a fraction by the same number, we multiply *the fraction* by  $\frac{3}{3}$ ,  $\frac{4}{4}$ ,  $\frac{5}{5}$ , etc., or 1 ; hence no change of value. Form is changed because we introduce new factors. Teach changing to lower or lowest terms. Converse of Step 6. In changing to higher or lower terms, require pupils to distinguish between *the fraction* and *its terms*. Do not allow the expressions “multiply by,” or “multiplying the fraction by.”

STEP 8.—Mental examples, concrete and abstract, in review. Change whole or mixed numbers to improper fractions. (See questions after Step 4.) Oral work first.

STEP 9.—Change improper fractions to whole or mixed numbers. (See Step 6.)

STEP 10.—Review changing to higher or lower terms.

Teach Common Denominator. Review Step 6, as introducing the subject.

$\frac{1}{2}, \frac{1}{3}, \frac{1}{4} = \frac{6}{12}, \frac{4}{12}, \frac{3}{12}$ . Since the last fractions have the *same* denominator, that denominator is *common* to all and may be called the *Common Denominator*.

Lead pupils to see that it contains all the denominators, 2, 3, 4, exactly, and is, therefore, a *common dividend*. Since there can be *no smaller* common denominator for them, it is the *Least Common Denominator*.

Show that the Least Common Denominator is the Least Common Dividend of the denominators.

STEP 11.—Teach Addition and Subtraction of Fractions. Have many simple mental examples, abstract and concrete, before written work. The necessity for common denominator will be obvious.

Grade examples carefully. Do not change mixed numbers to improper fractions. Add parts separately. When subtracting one mixed number from another, if the fraction of the upper number is less than that of the lower, write out as follows :

$$\begin{array}{r} 16\frac{1}{7} = 15\frac{8}{7} = 15\frac{2}{1} \\ 11\frac{1}{3} = 11\frac{1}{3} = 11\frac{7}{21} \\ \hline 4\frac{1}{21}. \end{array}$$

STEP 12.—Continue Addition and Subtraction. Abstract and concrete work, which is practical.

STEP 13.—Teach Multiplication of Fractions as Cancellation.

STEP 14.—Division of Fractions.

- a.*  $\frac{2}{3} \div 5$  The necessity for inverting the divisor may be  
*b.*  $5 \div \frac{2}{3}$  shown by changing the fractions to a common denominator,  
*c.*  $\frac{2}{3} \div \frac{5}{8}$  nominator, when (if pupils understand the denominator to be only a *name* for *the unit*) the quotient will be seen to be the quotient of the numerators.

The written solution may then be shortened, and the convenience of cancelling, before multiplying, shown.

$$\begin{array}{l} a. \quad \frac{2}{3} \div 5 = \frac{2}{3} \div \frac{1}{5} = \frac{2}{1} \\ \quad \frac{2}{3} \div 5 = \frac{2}{3} \times \frac{1}{5} = \frac{2}{15} \\ b. \quad 5 \div \frac{2}{3} = \frac{1}{3} \div \frac{2}{3} = \frac{1}{2} = 7\frac{1}{2} \\ \quad 5 \div \frac{2}{3} = 5 \times \frac{3}{2} = \frac{15}{2} = 7\frac{1}{2} \\ c. \quad \frac{2}{3} \div \frac{5}{8} = \frac{2}{3} \div \frac{1}{8} = \frac{2}{3} = \frac{4}{3} \\ \quad \frac{2}{3} \div \frac{5}{8} = \frac{2}{3} \times \frac{8}{5} = \frac{16}{15} \end{array}$$

## DECIMAL FRACTIONS.

DEFINITION.—Teach that a decimal fraction is a fraction whose denominator is 10 or some power of 10, whether the denominator is expressed or understood.

To develop the idea of *decimal places*, write a number in U. S. money, as \$33.33, using the same figure throughout. Review the comparative local value of each figure, *i. e.*,

The first 3 is 30 dollars.

The second 3 is 3 dollars =  $\frac{1}{10}$  of \$30 = \$3.

The third 3 is  $\frac{3}{10}$  dollars =  $\frac{1}{10}$  of \$3 = \$0.30.

The fourth 3 is  $\frac{3}{100}$  dollars =  $\frac{1}{10}$  of \$0.30 = \$0.03.

*i. e.*, each place is one tenth of the next place to the left. In the same way it may be shown that in any number, as in 25.38, a unit of any place is one-tenth of a unit one place to the left. The necessity for the decimal point may be easily shown. The places at the right of the point are called *decimal* places to distinguish them from the places at its left, and also because successive divisions by 10 (*i. e.*, *decimal* divisions) were performed to produce them. Work out the divisions by common fractions and the *names* of the places will be readily seen.

WRITING.—Decimals may be written as whole numbers because the decimal orders increase and decrease in the same ratio and direction as integral orders. Ciphers are written when orders are omitted, as in whole numbers.

READING.—By writing each order of several decimals as a common fraction, performing the addition of the parts, the reading may be easily shown.

#### CHANGING COMMON FRACTIONS TO DECIMAL FRACTIONS.

Perform the division indicated.

Change Decimal Fractions to Common Fractions by omitting the decimal point, supplying the denominator, and changing the fraction to its simplest form.

ADDITION AND SUBTRACTION.—Since fractions cannot be added nor subtracted unless they have a common denominator, for this reason and for convenience we write the decimals so that the same orders are in the same column; and since decimal orders increase and decrease in the same ratio and direction as integral orders, we add or subtract as in whole numbers, placing the decimal point in its place.

NOTE.—In subtracting, when the minuend has a smaller



number of places than the subtrahend, we change it to the same denominator as the subtrahend by supposing decimal ciphers added.

MULTIPLICATION.—Multiply as in whole numbers, since decimal orders increase and decrease as integral orders do. Pointing off may be explained by reference to common fractions, *e. g.*,  $.003 \times .02$ ,  $\frac{3}{1000} \times \frac{2}{100} = \frac{6}{100000} = .00006$ .

DIVISION.—Converse of Multiplication. When the Dividend contains a smaller number of decimal places than the Divisor, the necessity for making the same number of places in both by annexing decimal ciphers to the dividend may be shown by reference to common fractions, *i. e.*, when the fractions have a common denominator, their quotient is the quotient of the numerator.

## COMPARISON WITH WHOLE NUMBERS.

### SIMILARITIES.

Decimal orders increase in a ten-fold ratio from right to left. Decimal orders decrease in a ten-fold ratio from left to right. Therefore Decimals are written, read, added, subtracted, multiplied and divided as whole numbers are.

### DISSIMILARITIES.

Prefixing decimal ciphers to a decimal changes its value. Annexing decimal ciphers to a decimal does *not* change its value.

## SUGGESTIONS FOR TEACHING COMPOUND NUMBERS.

In teaching the tables for compound numbers, great care should be taken to be thorough in the mental and oral drill as the first step.

If the drill be limited to small numbers, which are easily retained in the memory, until great rapidity is secured in obtaining results, success will be reasonably sure.

Have the class write only the desired result. Read ten or more simple questions; then call for the written answers. By some such device, every member of the class performs all the work he can, *e. g.*: How many quarts in 1 gallon? In 8 gallons? In 5 gallons? In 10 gallons? In 3 gallons? How many pints in 2 quarts? In 4 quarts? In 8 quarts? In 1 gallon? In 2 gallons? In 2 quarts and 1 pint? In 4 quarts and 1 pint?

Continue these drills in each table until the pupils can write the answers as fast as you can clearly read the questions.

When a reasonable degree of quickness is acquired in the first table taught, teach *Reduction, Descending* and *Ascending* as mutually proving each other. This will show the relation of the two processes. Teach no rule until the process is well understood by the pupils. Be sure to insist upon rapid drill work every day.

### SQUARE MEASURE.

Teach the tables as above, and Reduction ascending and descending. In the division by  $30\frac{1}{4}$ , as well as by  $16\frac{1}{2}$  in linear measure, be careful to impress that the remainder is halves or quarters, as the case may be; as soon as you profitably can, teach to find the area of rectangular surfaces. Make the drill upon this topic as thorough as in the tables, so that, in all such figures, the areas can be given as rapidly as pupils can use the Multiplication tables. Teach the areas of right-angled triangles where the base and perpendicular are given, in the same way. Then take other forms of triangles, etc., that can be divided into such triangles. Have the pupils measure the base and perpendicular of these triangles and find the area of such figures.

In teaching Cubic Measure, use the same thorough drill as in the other tables, till the contents of such solids can be readily and accurately given. Use only those solids having a regular form.

In teaching addition and subtraction of Compound Numbers, call special attention to the difference of scales of notation. One device for this may be, by using the change of improper fractions to whole or mixed numbers where the denominator is constantly changing.

In multiplication and division of these numbers, continue the same sharp, quick drill. At least five minutes of this work should precede every lesson, *e. g.*, *a.* 3 quarts  $\times 6 = 18$  quarts or 4 gallons 2 quarts; 9 inches  $\times 8 = 72$  inches or 6 feet; 50 rods  $\times 8 = 400$  rods or 1 mile 80 rods; 3 pecks  $\times 12 = 36$  pecks or 9 bushels.

*b.*  $\frac{1}{4}$  of 6 gallons  $= 6$  gallons  $\div 4$  or 1 gallon 2 quarts;  $\frac{1}{3}$  of 5 yards  $= 5$  yards  $\div 3$  or 1 yard 2 feet;  $\frac{1}{11}$  of 2 rods  $= 2$  rods  $\div 11$  or 33 feet  $\div 11 = 3$  feet;  $\frac{1}{3}$  of 4 quarts 1 pint  $= 4$  quarts 1 pint  $\div 3 = 1$  quart 1 pint.

#### PERCENTAGE.

By the term per cent. is meant a certain number of hundredths of a number or things, and the unit of it may be expressed thus.  $\frac{1}{100}$ , .01, 1%, one per cent. The fractional form should be used first, as it is more easily understood and explained by the pupil.

The following is a simple method of developing the subject: What part of a number is 1% of it? 2%, 5% and so on? Express 1%, 2%, 5%, or any given per cent. in the form of a common fraction.

What is 1% of \$4,000? \$400? \$40? \$4? 8,000 feet? 800 feet? 80 feet? 8 feet? What is 2%;  $2\frac{1}{2}\%$ ; 3%;  $3\frac{1}{2}\%$ ; 4%, etc., of the same numbers? Similar rapid mental work, using suitable numbers, should be required to 11%.

More difficult examples, using slate and pencil with any per cent., may now be profitably used, always finding *one* per cent. first, by moving the decimal point. The explanation of the examples is all the rule necessary.

The pupils can be easily led to see that they have been

dividing the given number by the denominator and multiplying the quotient by the numerator. One more step will show them that multiplying the number by the numerator and dividing the product by the denominator produces the same result, and they have the reasons for multiplying the base by the rate %, etc.

As 5c% and  $\frac{1}{2}$ % are often confounded by the pupils, they should be taught by comparison.

A drill often repeated with the following or similar numbers will make the pupils rapid and accurate.

What is 50%? What is  $\frac{1}{2}$ % of 16,000 feet? 1,600 feet? 160 feet? 16 feet? \$8,000? \$800? \$80? \$8? etc.

25% and  $\frac{1}{4}$ %; 75% and  $\frac{3}{4}$ %;  $12\frac{1}{2}$ % and  $\frac{1}{8}$ %;  $33\frac{1}{3}$ % and  $\frac{1}{3}$ %;  $16\frac{2}{3}$ % and  $\frac{1}{6}$ %; 20% and  $\frac{1}{5}$ %, should be used in the same manner, mentally, using suitable numbers for each couplet.

Finding a required number, the percentage and rate being given, is the reverse of the foregoing operations. The answers to the examples given can be used as the percentage. Thus, \$40 is 1% of how many dollars? \$4? \$.40? \$.04? Thus, 160 feet is 2% of how many feet? 16 feet? 1.6 feet? .16 foot?

With suitable numbers continue mental operations with each per cent. up to 11. Each of the following numbers is 50% of what number? 800 feet? 80 feet? \$4,000? \$400? \$40? \$4? \$.40? 8 feet? .8 foot? .08 foot? \$40? \$4? \$.40 each  $\frac{1}{2}$ % of what number? Use all the couplets named in a similar manner.

The per cent. value of the following fractions should be taught until the pupils can tell them at sight:

$$\frac{1}{2}, \frac{1}{3}, \frac{2}{3}, \frac{3}{4}, \frac{1}{4}, \frac{5}{8}, \frac{3}{8}, \frac{1}{8}, \frac{7}{8}, \frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5}$$

The relation of numbers should be now taught if the pupils are not thoroughly familiar with the subject.

Thus, 1 is what part of 2? What per cent.?

1 is what part of 4? Of 8? Of 5? Of 6? What per cent. of each?

2 is what part of 4? Of 8? Of 5? Of 6? What per cent. of each?

3 is what part of 4? Of 8? Of 5? Of 6? What per cent. of each?

4 is what part of 4? Of 8? Of 5? Of 6? What per cent. of each?

Continue this drill until the pupils see at a glance what per cent. one number is of the other, increasing the numbers compared, but using for mental work such numbers as when written fractionally will reduce to one of the fractions written above.

Lead the pupils to see that when two numbers are given to find the rate per cent., that a fraction can be formed by them, and such a part of 100% taken as is indicated by the fraction.

For mechanical use, show the pupils that the number preceded by "of" should be the denominator of the fraction.

Example.—What per cent. of \$40 is \$20?  $\frac{20}{40} = \frac{1}{2} = 50\%$

\$20 is what per cent. of \$40?  $\frac{20}{40} = \frac{1}{2} = 50\%$

### INTEREST.

Interest is money paid for the use of money and is computed the same as percentage, with the addition of the factor, *time*.

Lead the pupils to see that the interest on any sum of money at a given rate for one year is the same as the percentage; therefore, *one year* is the unit of time.

Finding the interest for years and months on a given sum at a given rate would be the first work in interest.

Mental work should always precede written work, and practiced until the pupils can give clear explanations in good language.

Examples.—What is the interest on \$600 at 6% for 1 year? 2 years? 2 years, 6 months? 2 years, 3 months? 2 years, 9 months? 2 years, 4 months? 2 years, 8 months?

Use in a similar manner all per cents. up to 7%, selecting principals that are multiples of the aliquot parts of 12, at first.

When teaching the 6% method, have the pupils understand that money on interest at 6% draws a sum equal to six hundredths of itself each year, five thousandths each month and one one-thousandth every six days.

Short devices can be profitably used when the teacher thoroughly sees the benefit from their use.

The device using 60 days as a basis of time in computing interest at 6% for short periods of time, is both simple and useful.

(a) It teaches pupils to develop numbers.

(b) Many examples in Bank Discount can be solved mentally.

(c) It saves time for pupil and teacher.

What is the Bank Discount on \$420.50 at 6% for 90 days?

90 days + 3 days = 93 days, maturity 93 days = 60 days + 30 days + 3 days.

$$\begin{array}{rcl}
 100) \$420.50. & & \\
 2) \$4.205 & \text{Int. for 60 days.} & \\
 10) 2.1025 & \text{" " 30 "} & \\
 .21025 & \text{" " 3 "} & \\
 \hline
 \$6.51775 & \text{" " 93 "} & 
 \end{array}$$

Money put at interest at 6% draws a sum equal to one hundredth part of itself in 60 days.

### PROPORTION.

*First.* The pupil must be taught *Ratio*; then, that Proportion is simply dealing with ratios.

Teach that in a completed proportion the product of the extremes is always equal to the product of the means.

*Second.* That all ratios are abstract numbers. The ratio of 6 houses to 3 houses is not 2 houses.

The pupil should be taught that the same relation, the same ratio exists between 3 hours and 6 hours, and between 4 dollars and 8 dollars. All the numbers or terms may be concrete, or two may be concrete and two abstract, but things of the same



kind must be compared. There can be no comparison—no ratio—between 6 rods and 12 gallons; nor between 10 dollars and 20 cents.

*Third.* Teach the pupil to find the missing term in such expressions as these:

$$2 : 4 :: 6 : ( \quad )$$

$$a : b :: c : x$$

$$3 : 9 :: ( \quad ) : 30$$

$$a : b :: x : c$$

$$5 : ( \quad ) :: 8 : 48$$

$$a : x :: z : c$$

$$( \quad ) : 12 :: 16 : 32$$

$$x : a :: b : c$$

*Fourth.* Teach Compound Proportion by Cause and Effect.

#### MODEL EXAMPLE.

If 6 men, in 10 days of 9 hours each, build 25 rods of fence, how many hours a day must 8 men work to build 48 rods in 12 days?

1st cause.		2d cause.		1st effect.	2d effect.
6 men	}	8 men	}	::	25 rods: 48 rods.
10 days		12 days			
9 hours		( ) hours			
$\frac{6 \times 10 \times 9 \times 48}{8 \times 12 \times 25}$				Work by Cancellation.	

*Fifth.* Proportion is the place for thought work. Too many pupils, according to Rule, "make the third term like the answer sought," then "consider," &c., and if the answer comes out all right, well; if it does not, they change the terms. The pupil should know why he puts a term in a certain place.

#### ALGEBRA.

In a text book on science it is essential that all the principles be thoroughly analyzed and systematized.

In beginning the study of Algebra, it is taken for granted that the pupil understands the symbols of operations, +, —, &c., and how to use them with rapidity and ease with numbers. He should be taught at once, that in Algebra, letters, as well

as figures, are used to represent numbers. We may say  $a$  books as well as 3 books. 3 books and 2 books are 5 books:—written  $3+2=5$ . Lead up to  $a+b=\text{what?}$   $a+a=?$

Indicate the sum of  $x$  and  $y$ ; the sum of  $a$  and  $b$  diminished by  $c$ .

Spend two weeks on such exercises.

#### ORAL EXERCISES.

1. If one orange costs 4 cents, what will 3 oranges cost? What will  $a$  oranges cost?

2. If one book costs  $a$  cents, what will  $x$  books cost?  $y$  books?

3. A carriage costs \$90 and a horse  $x$  dollars. Give the expression for the cost of both.

4. A carriage costs \$90 more than a horse. If  $x$  represents the cost of the horse, what will represent the cost of the carriage?

5. If the carriage costs \$90 less than the horse, and  $x$  represents the cost of the horse, what is the cost of the carriage?

Three weeks on problems of this kind.

1. A man bought goods for  $a$  dollars and sold them so as to lose  $c$  dollars; what did he get for them?

2. A man had  $x$  books; he sold  $y$  books and gave away  $b$  books; how many did he have left?

3. I have  $x$  dollars; after paying one man  $y$  dollars and another man 10 dollars, what shall I have left?

Let the pupil read the following expressions and make examples to illustrate them:

4.  $x+y$ ;  $x-y$ ,  $x+6$ ,  $x+y+m$ ,  $x+y-m$ ,  $x+(y-m)$ .

5. If  $x=12$ ,  $y=8$ ,  $m=6$ , what is the value of the algebraic quantities in No. 4?

6. What is a coefficient? A monomial? A binomial? A trinomial?

Spend two weeks on the above.

## ADDITION.—

+ 3x	— 3x	+ 3x
+ 4x	— 4x	— 2x
—	—	+ 6x
+ 7x	— 7x	—
		+ 7x

Find sum of  $6y-3y$ ,  $2y-y$ ,  $9y$ .

Find sum of 3 ( $a+b$ ), 2 ( $a+b$ ), 7 ( $a+b$ ).

Let the pupils work on these examples till they can readily work such examples as this:

$$7ax + 2bx + 6cx - 3ay + by + 4cy + 2ax + 3bx - cx - 4ay - 2by - 5bx - 5cx + 5ay - 4cy + by.$$

Probably a couple of weeks on this.

## SUBTRACTION.—

From  $12x$  take  $6x$ . From  $2x$  take  $3x+4x$ .

From  $20$  take  $10x-2x$ .

Then:

$x-y+z$	$4x-3x-2x-7x+9.$
$x+y+z$	$2x-x-x-7x+3.$
— — — — —	— — — — —

Spend two weeks on subtraction.

## MULTIPLICATION.—

$x$  multiplied by  $x$  gives  $x^2$ . Explain the word exponent  
 $x$  multiplied by  $y$  gives  $xy$ . Explain the two ways of expressing multiplication by Letters.

A man bought  $x$  horses at  $y$  dollars apiece. What did they cost him?

$(a+d) \times d$	$(a-d) \times d$
$a+b$ $a-b$	$a^2b$ $a^2+b$
$a+b$ / $a-b$	$a^2b^3$ $a^2+b^2$
— — — — —	— — — — —

$$x^5 + 3x^4y + 4x^3y + 3x^2y^2 + 5xy^3 \text{ by } x-2y.$$

In multiplication, like signs, give plus, unlike, minus.

Teach the three formulas so that pupils can work similar examples by inspection.

1. The square of the sum of two quantities.

2. The square of the difference of two quantities.
3. The sum of two quantities multiplied by their difference.

$$(x+y)^2 = x^2 + 2xy + y^2$$

$$(x-y)^2 = x^2 - 2xy + y^2$$

$$(x+y)(x-y) = x^2 - y^2$$

Teach simple factoring.

Teach quantities having a common monomial in all the terms, as  $2ab + 4ac - 8ad$ .

Spend three weeks on multiplication.

DIVISION.—

$$6a^5 \times 2a^3 = 12a^5 + 3 = 12a^8$$

$$\text{Hence, } 12a^8 \div 2a^3 = 6a^8 - 3 = 6a^5$$

$x^2 \div x^2 = x^2 - 2 = x^0 = 1$ , because any quantity divided by itself equals unity.

$$ab \div ab = 1$$

$$ax \div ax = 1$$

$$a^2b^3d^5 \div abd^2 = ab^2d^3$$

Divide a binomial by a monomial.

$$8a^2b^3c + 10a^4b^2c \div 2abc$$

Divide polynomials by binomials.

Divide polynomials by trinomials.

Factoring continued.

Spend three weeks on division.

During first half year to

THE EQUATION.—

$$x = 12. \quad x, \text{ the first member.}$$

$$12 \text{ the second member.}$$

This may be written either way :  $x = 12$ , or  $12 = x$ .

$$a + b = c + d, \text{ or } c + d = a + b.$$

FIRST PRINCIPLE.—If equal quantities be added to both members, the equality is not destroyed. In a pair of balances, if you have two pounds of sugar in one pan, you must have two pounds in the other in order to have equilibrium. If now a pound be added to each side or placed in each pan, there will still be equilibrium—the equation is still perfect.  $x = 12$ . Add 5 to each side,  $x + 5 = 12 + 5$ , or  $x + 5 = 17$ .

SECOND PRINCIPLE.—If equal quantities be subtracted from both members, the equality is not destroyed.

$$x=12, x-4=12-4, \text{ or } x-4=8.$$

The balance may again be used to illustrate.

THIRD AND FOURTH PRINCIPLES.—If both members of the equation be multiplied or divided by the same quantity or number, the equality will not be destroyed.

Give numerous examples to illustrate these four principles.

From the four principles learned the pupil will understand that a term may be transposed from one member to the other, provided the sign of the term be changed; as,  $x+5=12$ . Subtracting five from each member of the equation we have  $x=12-5$ .

Also teach that all the signs of an equation may be changed without destroying the equality.

The pupil is now prepared to solve problems similar to the following:

If a certain number be increased by 1 and the sum divided by 5, the quotient will be 3. Find the number.

$$\frac{x+1}{5}=3$$

Clear the equation of fractions, by multiplying both members by 5, applying the principles of multiplication of fractions learned in Arithmetic.  $x+1=15$ .

Subtract 1 from each member.

$$x+1-1=15-1.$$

$$x=14$$

Find a number such, that if you multiply it by 5, subtract 20 from the product, divide the remainder by 7 and add 24 to the quotient, you obtain the number itself.

A slate or paper may be used for these problems, but every step should be given clearly and fully, and nothing should be taken for granted. For the present, allow no such expressions as "transposing," "combining and dividing, we have," &c.

The careless pupil says: "x equals A."

The careful pupil says: "Let x equal the number of dollars A has."

Teach the careless pupil to be careful.

After the foregoing work has been taught, the text-book should be studied.

## BOOK-KEEPING.

### EIGHTH YEAR.

*First*—Teach the two sides of accounts, debit and credit, by the use of Personal Accounts. Ask the class what would be done if a person buys 5 lbs. of sugar and does not pay for it; some pupil will give a correct answer. The teacher should then show how a person is charged, and in the same way lead the pupil to see when and how a person is credited; also, what the excess of the account will show.

Several examples should then be given for the pupils to work out. All business terms should be carefully explained.

*Second*—Take the Cash Account; teach when it is to be debited and when credited, by working an account; what the balance of the account shows and how the balance is proved.

Give a half dozen or more examples for pupils to work.

*Third*—Teach the other general accounts in the order of Merchandise and Expense.

Teach how to write receipts, notes, drafts and checks, bills receivable, bills payable.

*Fourth*—Teach the principle that for everything given something is received, leading the pupil up to this by numerous simple examples. Most of the class will see from the work already done that we have debited the account with the cost, or with the amount received, and credited it with what it produced.



*Fifth*—Let the first set be simple transactions. Work it through Day Book and Ledger, doing all the work with the class, by having the pupils write the transactions of Day Book on the Board, showing them the arrangement, capitals, punctuation and ruling.

The Ledger should be treated in the same manner. Work a set.

*Sixth*—Work a set showing how the principles of Double Entry can be applied to a retail business, having all papers, such as notes, checks, bills and letters, written by the pupils.

In teaching Single Entry:

1. Present the subject to No. 3, as above, then through simple transactions, as, Sold Geo. Jones 5 doz. eggs at 30¢, 12 lbs. butter at 35¢, and he has paid me on account \$3. Teach the use of Day Book, Cash Book and Ledger.

Show the pupil how to work what is new and let him do the rest.

2. Let all the work be done carefully, neatly and accurately. Work as many complete sets as time will allow.

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## HISTORY.

The benefits derived from the study of History are:

- (1) A taste for good reading.
- (2) A knowledge of the essential facts.
- (3) The cultivation of the powers of memory, imagination and reflection.
- (4) The cultivation of language.

### METHODS SUGGESTED FOR TEACHING HISTORY.

Catechetical:

- (1) For testing a class rapidly.
- (2) For correcting previous work with the subject under discussion.

Comparison:

- (1) Most natural way to show the relation of past events with the present.

Topical.

- (1) For cultivating the observation, by selecting topics of importance.
- (2) For learning that persons, not things, are the nucleus of events.
- (3) For learning to express their thoughts freely and connectedly.

Reproduction:

- (1) To cultivate memory and imagination.
- (2) To cultivate language.

Map Drawing:

History and Geography should be taught together. Have maps drawn with all methods, and locate all important places mentioned in the lessons.

DEVICES SUGGESTED FOR TOPICAL TEACHING.

I. Have different pupils name topics in the lesson.

- (1) To ascertain if the lesson has been well prepared
- (2) To strengthen the memory.

II. (1) A pupil selects a topic and tells what he knows about it; if others have more information upon the subject it is given until the topic is thoroughly discussed.

- (2) Topics selected by teacher or other pupils.
- (3) Stories and anecdotes told in connection with the topics under discussion.

III. Reproduction:

- (1) Assign the same topic to each pupil and criticise by comparison.
- (2.) Give each pupil at the board a different topic, change places and correct work.
- (3) Have the class criticise the blackboard work, as to expression, capitalization, punctuation, spelling, statement of facts and general appearance.

## LANGUAGE.

## PREFATORY SUGGESTIONS

These are as exhaustive as the space would allow. No teacher can secure the best results from the use of the various exercises proposed, without making a most earnest, thoughtful and constant *study* of and *reference* to these suggestions, pp. 211 to 219, inclusive. No teacher can work to the best advantage without knowing the precise character and amount of work done in the grades beside her own.

## COMPOSITION EXERCISES.

- a.* Conversational Lessons, pp. 212 to 213, 1st, 2d, 3d, 4th, 5th years.
- b.* "Filling-in" Exercises, p. 213, 1st, 2d, 3d, 4th, 5th years.
- c.* Dictation " p. 214, all grades.
- d.* Reproduction " p. 215, " "
- e.* Picture " p. 216, after 2d year.
- f.* Letter writing, " " "
- g.* Sentential Exercises (Oral and Written).
  1. Sentence Forming, all grades.
  2. Expansion, after 4th year.
  3. Combination, " " "
  4. Transformation, 6th, 7th, 8th years.
  5. Inversion, etc., " " " "
- h.* Formal and Original Composition:
  1. Narration.
  2. Description.
  3. Brief Historical Sketches.
  4. " Biographical "
  5. Outlines of Books Read.
  6. General Topics.
  7. Current Events.
  8. Paraphrasing.

9. Minutes of imaginary meetings of societies.
10. Advertisements, Invitations, etc.
11. Interpretations of Maxims and Proverbs.

### CONVERSATIONAL LESSONS.

The conversational method is the *natural* method. Even the masters of language must frame their thoughts before making the effort to speak or write. A lack of readiness or of accuracy in conversation more certainly marks the uneducated than does a lack of power in writing. "The art of composition may be quite independent of the pen, and at first proceeds best without it."

The conversational lesson is the most reasonable preparation for early effort in written composition and it is the first step towards a normal *development of the power of expression*, which should be the aim of all language teaching. "It is the tongue and not the hand that usually fixes good or bad habits of speech."

PREPARATION.—Conversational lessons which are not thought of until the "eleventh hour" are generally brilliant failures. The object of each lesson should be clear in the teacher's mind, and the plan for accomplishing this object should be definite to the minutest detail.

#### NUMBER OF LESSONS.—

1st and 2d years, at least three per week.

3d " 4th " " " two " "

5th year, " " one " "

SUBJECTS.—The subjects should be such as will interest and instruct the children, and they should be carefully adapted to the grade.

The progress of the class in *intelligent reading* will be found an excellent guide in selecting subjects. If pictures are used in the first year, it should be toward the end of the year.

Everyday experiences, sports, places visited, etc., will be found the best subjects for early lessons.

CONDUCTING A LESSON.—Each lesson should be an animated and interesting *conversation*, in which the pupils have decidedly the larger share. The teacher should encourage the pupils to talk to her, and she should talk *as little as possible*. Do not allow pupils to ramble and talk about everything. Critically guide the recitals, and adroitly supply and explain when the learner hesitates for a word. Avoid monotony. Have a definite, practical, well-studied plan for each lesson, and follow it. Proceed from the simple to the difficult *very gradually*. Prevailing faults should indicate review and drill needed.

ERRORS should be pleasantly corrected as soon as made, by the pupils or teacher, preferably the former. After the correction is made, have the pupil who made the error *repeat* the *whole sentence*, giving the correct form. Have hands raised by pupils who notice errors. Encourage in every way and *do not hurry*.

### “FILLING-IN” EXERCISES

Are recommended for all the primary grades, as a most excellent preparation for copying dictated work. Adapt selections to the grade, at first requiring pupils to supply only a *single word*. See First Year outline; see Second Year outline; see Third Year outline; see Fourth Year outline.

Finally call upon them to supply various words omitted in a paragraph or story. Omit words, to supply which, pupils must think. Let the aim be to test points previously taught and to draw upon and enlarge the vocabulary. *Teach a new word* whenever a pupil tries to use it in a proper connection.

At first the skeleton sentence, paragraph or selection, may be written upon the board. (If written with oiled crayon upon paper, skeleton stories may be preserved for review. Paper is inexpensive, and a stick of oiled crayon, lasting a year, may be bought for 5¢.) After the omitted words are

supplied, erase them, and have the pupils reproduce orally and then in writing. Later the entire exercise may be removed and reproduced. As different words are proposed for the same place, write them, and have the pupils select the *best word*. Insist upon correct use of capitals, ordinary punctuation marks and correct spelling. In the lowest grade, simple drawings may be used to suggest words. Do not attempt too much in one lesson. These exercises afford opportunity for conversational lessons.

### DICTATION EXERCISES

Are a step in advance of the "Filling-in," and should be very simple at first. See First Year outline; see Second Year outline; see Third Year outline; see Fourth Year outline.

These exercises should be used in *all grades*. In the first and second years, use sentences previously used in "Filling-in." Do not give the dictation in any grade so soon after the filling-in that the former proves only a memoriter exercise. Plan the work so that the pupils' ability to use correct written forms will be tested constantly. In some grades the dictation of a selection previously used for filling-in may be profitably omitted, an oral reproduction taking its place. The dictation should then be a *new* test exercise.

The teacher should first read the selection through carefully, the pupils listening, "with pencils *at hand*—not *in hand*." Then dictate *once*, pausing when necessary. Teach punctuation as a natural part of writing. Dictate the marks at times; at other times, require pupils to supply them *as they write*.

Whenever possible, have the dictation carefully written upon the board *before* the lesson, but out of sight. After the pupils write, let *them* compare their work with that on the board.

Papers may be exchanged or not, as the teacher considers best; but in language, as in all other subjects, pupils should be trained to inspect, correct and revise their own and others' written work. (See Suggestions for Written Work, pp. 216 and 217).



## REPRODUCTION.

The selections for this purpose should be of moderate length, and if not familiar, the production should be made *orally* before the effort to write. Several pupils may participate in the same oral recital. At first, it may be well to call upon the brighter members of the class; but the development of those of average ability is more important. "Cut-up" stories, *i. e.*, stories given to different pupils, in sections which are to be fitted together, are very interesting to younger pupils.

## METHOD.

FIRST LESSON.—The teacher or a pupil should carefully read the selections to the class. Then the teacher should tell the story, varying the language, but not the order. If necessary, repeat the second step, but in still different words, so as to avoid all possibility of memorizing set forms. Now have questions by pupils and teacher to insure a clear understanding of facts. Have one or more pupils tell the story; class and teacher correct mistakes and noting omissions.

SECOND LESSON.—(Two or three days after first lesson). Have one or two careful oral reproductions, and then have pupils write. Blackboard outlines, if used at all, should be used only in the early efforts, and then very sparingly. They may improve the story, but they surely dull the memory if used too much. If the "Filling-in" and Dictation exercises have received sufficient and systematic attention, very little outlining will be needed. (See pp. 213-214).

THIRD LESSON.—(Several days after second lesson). With the teacher's assistance, the pupils should inspect, revise, and correct the work of the second lesson and write final copies. Encourage effort by exhibiting best work.

For variety, each pupil may be given a short, simple story to read carefully several times, reproduce, correct, revise, and

finally rewrite; but all should use the same selection at first. The lessons should not be closely consecutive. The teacher should carefully and constantly guide the pupils as *they write*, giving *individual* help where most needed.

### WRITING FROM PICTURES.

As has been suggested, conversational lessons upon pictures may begin in the second year. But writing directly from pictures should be undertaken only after considerable practice in Filling-in, Dictation and Reproduction. Select the pictures with care. Pictures of *animals* are particularly pleasing to young children. At first, let conversational lessons and oral composition precede the effort to write about a picture, *i. e.*, as long as necessary. Several lessons, not consecutive, may be given upon the same picture. In order that observation and expression may be carefully trained, the teacher should ask *logical* questions about the pictures used at first.

1st Lesson.—Note objects; give names; study *new words*.

2d “ —Determine qualities of objects.

3d “ —Determine relations of parts of pictures.

4th “ —Conversational lesson upon pictures.

5th “ —Oral composition about pictures.

6th “ —Written composition about pictures.

7th “ —Inspection, revision and rewriting.

Some of the steps indicated may be omitted as pupils advance.

### GENERAL SUGGESTIONS FOR WRITTEN EXERCISES.

*a.* LENGTH.—Assign no more work than can be *well done* in the time devoted to it. Rigidly insist upon neatness and careful arrangement; but do not render these essentials impossible by attempting too much in one lesson.

*b.* INSPECTION.—*The teacher should give her attention to the*

*pupils while they are writing*, and should know what they are doing. If pupils are carefully observed and directed *during the preparation* of written work, it will seldom be necessary to collect exercises and correct them out of class. As a rule, the pupil should correct his own (or his classmate's) errors. "The teacher can be more helpful to pupils by passing from one to another, making corrections, answering questions, offering suggestions, *during the hour of writing*, than by making formal corrections after exercises are written."

c. IN CORRECTING, USE ONLY A SIMPLE DASH in calling the learner's attention to a fault. Lead him to study out the error and correct *himself*.

d. Use papers of uniform size, and seat pupils or divide work so that copying cannot be done.

e. Teach margin, etc., from the outset.

## COMPOSITION

Should be considered the most vital part—the objective point of any course of language study. Before pupils are ready to "write compositions," they must acquire some *power* in the *use of correct language*, oral and written. It is believed that such lessons as are included in and suggested by this Course of Study will bring about the preparation needed for formal composition in the 6th, 7th and 8th grades.

SUBJECTS. One of the difficulties in the beginning of regular composition work is the choice of subjects. Pupils are sometimes asked to give learned opinions about Honesty or some other moral virtue before they can tell how they enjoyed the mountains or seashore last summer. In such classes, valuable time is wasted in copying encyclopedic facts which are tumbled together and called a "composition."

THE FIRST SUBJECTS should appeal largely to observation and previously acquired knowledge and experience, gradually enlarging upon the work of the primary grades. (See pp. 214

to 217, inclusive.) Narration, Description, Reflection and Argument should follow each other in a natural order. (See 6th year, 7th year, 8th year.) The early subjects should be discussed and outlined in the class.

At first, oral composition should follow the outlining and precede the writing. This will prove judicious assistance to those who lack the power to express themselves readily. The *acquisition* and *formation* of ideas must precede the expression of ideas. Logical arrangement will be one of the valuable results of outlining; but it should be used only when needed.

CORRECTION OF ERRORS. (See p. 217.)

Common errors should be discussed for mutual benefit, *not* by the *teacher alone*. Lessons in friendly criticism of errors actually made in the class, are decidedly more beneficial than the "false syntax" diversions of "ye olden tyme." Begin with *common faults*, and do not attack too many at once.

Occasionally, a set of exercises should pass under the closest scrutiny of the teacher's eye, but "no teacher should undertake to correct all papers written by her pupils. If she does, her burden of work becomes too heavy to be borne, or the pupils have much less practice than they need."

STRIVE TO SECURE—

*First.* A steady, normal development of the power of expression.

*Second.* Sufficient variety to make the work interesting.

*Third.* Thoroughness, and neat habits.

*Fourth.* A gradual transition from the simple to the difficult.

TEACH, DRILL, TEST. Never give a lesson without a definite object in view.

## LETTER WRITING

Is recommended as one of the most practical lines of composition work.

The writing of letters should begin before the third year is finished, and should be a frequent exercise in all the succeeding

grades. The suggestions already given for written composition (p. 211 and pp. 214 to 219) will apply to letter writing as a legitimate branch of composition.

When we remember that the written composition of most persons consists entirely of letters, it must be conceded that letter writing is of sufficient practical importance to demand the most careful study. Its importance is now so generally recognized, that the authors of all our best text-books in language give it complete and careful treatment. Hence we specify no particular book and outline, no forms nor methods.

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## WRITING.

The aim of all instruction in writing in our public schools should be so to teach that when our pupils leave our Grammar Schools their writing should have a commercial value. Good writing will always command a fair price if it possesses two characteristics; it must be legible at a glance, not requiring study, and it must be done promptly. That person who can do the most with equal legibility will always command the highest wages.

The details of the work as laid down are such as meet the approval of all those who have made a specialty of this work, and have been successful in it.

### FIRST YEAR'S WORK.

The efforts of the teacher during this year must be directed towards securing good results in the following directions:

*First.* POSITION.—Bodies erect, both feet on the floor, heels together, toes at an angle of 60 degrees, forearm resting on the desk.

*Second.* PENHOLDING.—Pencil held lightly between the thumb and forefinger, the end of the thumb opposite the first joint of the forefinger, and these supported by the second finger, third and fourth fingers being closed upon the palm.

The first finger should touch the pencil at only two places—the *end* of the finger and opposite the palm knuckle.

This should be required at every drill and writing exercise during the year. At first, aim only to secure these results, then add gradually the following exercises to train the hand to a prompt and ready obedience to the will.

Describe ovals in the air, holding the pencil in the proper position in direct and reverse directions. The object is to secure position of pencil, and to secure prompt obedience of the muscles of the arm to the will. Begin slowly at first and increase in rapidity with practice. Aim to secure ultimately a speed of 50 ovals a minute. Repeat with a reverse motion. Vary the exercise by using the slate and pencil, and lead up to the use of lead pencil and paper. Time, five minutes each half day.

Teach first half-year the letters i, u, n, m, t. Second half-year teach v, w, x, r, s, o, c, e, a.

When the form of a letter is already known, the effort to repeat the letter quickly should begin, at first singly and later in groups and words. Require the best efforts of the pupils.

#### SECOND YEAR.

Use the preceding drill daily for a few minutes, to secure a correct position of body, feet, hands and pencil. Accept no poor work. The letters already taught should be constantly reviewed.

FIRST HALF-YEAR.—Teach d, p, l, b, h, k, j, y, z, g, q, f.

SECOND HALF-YEAR.—Continue the drill. Review the letters already taught, and teach these capitals: A, N, M, F, T, I, J, H, K, L, S. Use pencil and paper.

Practice each letter, using blackboard, slate and paper. Combine the letters in groups and words. Strive first for accuracy, and then for promptness of execution. Aim to secure finally 60 letters per minute.



## THIRD YEAR.

FIRST HALF.—Use daily drill upon the motions and things already taught. Teach the capitals O, C, F, B, D, G, P, R. Practice the joining of small letters, as n, m, o, c, &c. Use word combinations in the same way.

SECOND HALF.—Keep up daily drill in all the elements acquired. These are the ovals direct and inverse, also the horizontal groups of small letters and connected words. Teach the capitals Y, S, L. Practice the first stroke of capital W. This enters so largely into the remaining capital letters that it needs much practice. It is a modified form of the reversed oval and is a prominent part of W, Y, Q, U, X and Z. Allow no poor work.

## FOURTH YEAR.

FIRST HALF-YEAR.—Continue the drill upon all previous forms and elements previously taught. Add to this drill the W form repeated upon itself so as to form a spiral. In all writing and drill, accuracy of form is the first consideration, and rapidity is a secondary, and yet a very essential factor.

SECOND HALF-YEAR.—Continue the daily drill in rapid formation of the ovals, making especial use of the spiral. Group letters and words for legibility and rapidity. Strive to secure 120 letters a minute. Accept no poor work.

## FIFTH YEAR.

Continue the daily drill in rapid formation of the ovals and spirals; continue the grouping of words and letters. Practice correspondence, business and social forms. Use copy books only to show the progress of the pupils.

The elements of success are but few. Patient and persistent attention to the drills designed to secure accuracy and promptness will give that facility in writing which makes it of commercial value. Too much importance can hardly be attached to these points.

Accept no poor work. Require the best efforts of the pupil.

The price of prompt mechanical ability in any department of life is unremitting practice. One lesson a week upon the drills here laid down, is not too much time to be given during the remaining years of the school life to insure a reasonable excellence and promptness in this necessary branch of instruction.

## NATURE STUDIES.

The pupils must be *discoverers*. The teacher's position toward them is simply to place them in such relations to the object studied, that the investigation shall be profitable.

No hasty information should be given, simply as a help, if it would tend to lessen their curiosity, or check their eager pursuit of discovery.

For this work the teacher should make a thorough preparation by her own personal study of the object. She must have a definite purpose with each lesson, that she may sit with the class and study with them. They need to be guided. A logical sequence in the things to be discovered is necessary.

It is important also to understand just how far to proceed in any investigation. At first, only the most obvious features should be noted, and the things observed should be used as a language lesson. The age, interest and ability of the pupils, and, above all, the common sense of the teacher, must be the practical key to the solution of the problem.

## SPELLING.

Good spelling is the right form-expression of words, learned through close and careful observation. Frequent repetition in writing these forms serves to impress them on the memory.

It is one of the essential studies, and when acquired, becomes one of the distinctive ornaments of written language.

METHODS.—Thoroughness in drills or practice includes all the science necessary for teaching this subject. Steady and persistent copying of the words that pupils are unable to spell will ultimate in these words being spelled with accuracy and ease.

GRADE WORK.—In the lowest primary grades the aim should be to train the pupils so that they shall form the habit of close and careful observation. Children first learning to copy should trace over the words which have been selected by the teacher for them to learn. These words should be written on the blackboards, slips of paper or slates, by the teacher; afterwards, have the children try to reproduce them from the copy. Teachers should be very careful at this stage to inspect each child's work to see that no incorrect forms are learned. Give such assistance to the children as they individually require. Have the children write and rewrite the words until they are able to produce them from the copy without conscious effort. Require the children to compare, and teach them to correct any errors that may appear. The spelling work of the first two years should not include much more than the copying of words and sentences with *perfect accuracy*.

On entering upon dictation work, be careful to select the words which seem to be least difficult. Inspect all dictated and written language work, noting carefully the misspelled words. Keep a list of these words and have *daily* drills on them until *they are mastered*. Remember, that it is to the constant and persevering efforts made in copying—under watchful inspection—the words likely to be misspelled, that correct spelling will be secured and so become the result of a *fixed habit*.

It is recommended that each pupil in *grades above the Third*, record in a suitable blank book the words misspelled by each, arranged in alphabetical order; these words should then be

copied and given to the teacher, who should keep an alphabetical list of the different words that have been wrongly spelled.

This record will show, also, the number of times each word has been misspelled. Dictate these words in every spelling exercise until each one is spelled correctly without hesitation. Do not allow misspelled words to accumulate; teach these words before attempting others. The words forming the pupils' vocabulary in any grade must be learned in that grade.

The words and terms used in different branches of study in the several grades should be learned as they occur and be studied in the same manner as other words.

The examination tests should prove the pupils' ability to spell all words within their vocabulary.

## READING.

DEFINITION.—Reading is getting thought through the medium of words arranged in sentences. The words may be either written or printed.

It is of two kinds—*silent* and *oral*. Silent reading is limited to the definition given above. Oral reading includes silent reading and adds to it the proper vocal expression of the thought in the exact words of the author. Silent reading precedes the oral and is the more important. The main purpose of oral reading is to give the teacher absolute proof that the pupil's mind has correctly apprehended the thought. Inflection and emphasis are merely mechanical effects and are controlled by the thought itself. Articulation and pronunciation are learned simply by example and imitation, and the teacher should confine imitation to these particulars.

AIM.—To train pupils to grasp the thought in the sentences read. In reading, the sentence is to be regarded as the unit of thought.

PHONICS.—In the lowest grades no special drills in phonics are necessary. Whenever a word is pronounced incorrectly the teacher should simply call attention to it and pronounce the word very slowly and distinctly, then require the same pronunciation from the children. Allow no suppression or slurring of the oral elements.

ALPHABET.—Indexed words and alphabetical lists are matters of daily use. The object to be accomplished by the alphabet recitations, as indicated in the primary grades, is to give pupils a ready knowledge of the position of the letters as they are arranged in the English alphabet. Children should be trained to recite the alphabet with great rapidity. This will be a great aid to pupils in their use of dictionaries.

CLASSES.—No class below the Fourth Grade should exceed ten pupils, and the time devoted to the reading lesson should be limited to 15 minutes. If the new and difficult words have been studied in advance of the lesson, this amount of time will be ample.

METHOD.—Oral reading should represent the thought as first presented on the page by associated words. Errors in inflection or emphasis are positive proofs that the thought has not been clearly comprehended by the pupil. Whenever the reading is faulty the teacher should direct the child's mind in his processes of thought-getting. This can be done easily by judicious questioning and by calling the pupil's attention sharply to the thought until it is mastered. *Do not read a sentence for the child to imitate.*

The use of the blackboard is indispensable in teaching beginners and the script form of words is to be employed. As words are the elements of sentences, great care must be taken to have them thoroughly learned.

Words should be taught apart from the regular reading exercise and in advance of it. A word should be learned as something which is to be associated with the idea it represents in forming sentences. A word is simply a letter or combina-



tion of letters, used as the sign of an idea. It is learned only by associating it with its idea. Repeated acts of association serve to impress the word firmly on the memory. In teaching new words, then, the mental law of association should be as closely observed as possible. Appropriate objects, pictures, etc., should be freely used in the process until, by frequent repetitions, the word is incorporated into the consciousness of the pupil and is instantly recognized by him.

At first, teach about ten or fifteen words that will be needed in sentence-making; after these have been learned, arrange them in short sentences. Vary the sentences so to have the different kinds in every lesson. Have all words copied as fast as learned. Keep a list of all words used on the blackboard and have daily drills on them until each word is instantly recognized when it is pointed out. Teach, objectively, as many words as possible, and teach other words in phrases and sentences. In teaching the articles, pronounce them as parts of the words which they precede. Put new words into a great number of different sentences. Train children to read in easy, conversational tones. Avoid concert reading and teach to small groups or classes. See that each child has grasped the thought and until you feel sure that he has the thought, do not permit him to read.

For beginners, the reading should be of a very simple kind. Sentences that can be easily taken in by the eye and quickly apprehended should be selected. It will be found that more progress can be made by confining the children to short sentences during the first two years and establishing at the outset the habit of quickly grasping the thought, than to attempt to burden the mind with long and complicated sentences. What is read should be the expression of the thought as the child has interpreted it, and the language should seem to be his own.

After 200 or 250 words have been learned, take up the Chartbook. The changing from the script to the printed forms



need occasion no delay—two days at most, will enable pupils to read print without difficulty. If the book is used, place, in script, on the blackboard, one or two lessons that are to be read first and have the class read them. Then have these lessons read from the book. A few lessons of this kind and the transition is accomplished. Train pupils to read without pointing to the words with their fingers. Have the printed lessons copied in script.

In teaching the words in the reading books to primary classes, have the new and difficult ones placed on the blackboard a day or two in advance of the time of the reading lesson containing them. Have these words studied and copied many times. Use them for spelling lessons, also in the language work. Require the pupils to pronounce the word from its form before spelling. Do not allow a word to be spelled for the purpose of determining its pronunciation.

The reading books furnished to schools are specially graded to correspond with the several classes therein. They keep pace with the pupils' advancement, and the vocabulary used is that best adapted to the successive steps of progress in the several grades.

In selecting the lessons, the order of the reading book need not be followed. By choosing the lessons which seem to the teacher best adapted to the capacity of the class, better results will be obtained. It is recommended that the easier lessons of one book be read first; then take another book of the same grade and read in like manner, and so continue until a certain vocabulary of words can be read, without hesitation, at sight. Proceed gradually with the more difficult or advanced lessons. Select the most interesting lessons—dialogues are good—to teach natural expression. Do not read the same lessons over and over.

It is recommended that reading books be withheld from the pupils in Primary Grades until the time of the class exercise, so that pupils may gain the power to read at sight the grades

of reading to which they have been accustomed. This can be done only when the eye and faculties of the mind are trained to act in unison. After the lessons have been read, require the pupils to reproduce them, either by oral or written exercises; this will prove an excellent means to language study and will be a test of knowledge gained.

Encourage pupils to substitute synonyms in place of words used in the lessons. Frequent exercises in silent reading should be had for both oral and written reproductions.

## COURSE OF STUDY.



# COURSE OF STUDY IN MATHEMATICS.

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## ARITHMETIC.

### PRIMARY GRADES.

#### FIRST YEAR.

##### (FIRST HALF.)

Count objectively to 20, and write the numbers from dictation. Combinations in Addition to 10. Column examples using numbers of no more than two figures. Have simple concrete problems, pupils writing numerical solutions. Teach Roman numbers to XI.

##### (SECOND HALF.)

Combinations in Addition to 20. Write, read and add numbers of no more than three figures, the sum in no column exceeding 20. Teach Roman numbers to XX. Continue concrete examples. Count to 101 as directed in Manual, p. 188.

#### SECOND YEAR.

##### (FIRST HALF.)

Continue Addition, using numbers of no more than four figures, the sum in no column exceeding 35. Write, read and add. Tables and combinations through 6's. (See Suggestions on Fundamental Rules, Addition Tables). Concrete examples. Teach Roman numbers to LI.

##### (SECOND HALF.)

Continue column addition, using numbers of no more than six figures (two periods), the sum in no column greater than 50.

Addition Tables and combinations through 9's. (See Suggestions on Fundamental Rules). Teach Subtraction through two periods. (See Suggestions, p. 190.) Concrete examples. Teach Multiplication through 5. Roman numbers to CI.

### THIRD YEAR.

#### (FIRST HALF.)

Rapid Addition throughout the year.

Multiplication. (See Suggestions, pp. 190 and 191).

Addition and Subtraction. U. S. Money.

#### (SECOND HALF.)

Short Division (Divisor 1 to 9, inclusive). Multiplication and Division, U. S. Money, using *abstract divisors* no greater than 9. Continue concrete examples and Roman notation.

### FOURTH YEAR.

#### (FIRST HALF.)

Long Division. (Rapid Addition throughout the year).

Problems involving Fundamental Rules.

#### (SECOND HALF.)

Fractions to Multiplications of Fractions. (See Suggestions, pp. 192 to 195, inclusive, Steps 1 to 12).

Frequent drills in rapid use of fundamental operations.

### GRAMMAR GRADES.

#### FIFTH YEAR.

##### (FIRST HALF.)

Fractions completed. (See Suggestions, pp. 195, 196 and 197).

Tables—Linear, Square, Cubic, Liquid, Dry, Avoirdupois.

Time—Reduction, Ascending and Descending. (Suggestions, pp. 197, 198 and 199).



## (SECOND HALF.)

Fundamental Rules, Compound Numbers. Simple Problems. Mensuration Rectangular Plane Surfaces. (See Suggestions, pp. 197, 198 and 199).

## SIXTH YEAR.

## (FIRST HALF.)

Decimals; including

Cost of a certain number of lbs., price, per Ton given.

“ “ brick, shingles, etc., “ “ C or M “

U. S. Money completed. (See 2d Half, 3d Year).

Mensuration—Application of Square Measure to Carpeting, Plastering, Roofing, etc., etc. (See Suggestions, pp. 198 and 199).

## (SECOND HALF.)

Mensuration—Application of Cubic Measure to bins, cellars, walls, wood. (Suggestions, pp. 198 and 199).

Percentage begun and applied to Profit and Loss. (Suggestions, pp. 199 to 201).

Interest—Finding *interest* by the *Year* Method. (Suggestions, pp. 201 and 202.)

## SEVENTH YEAR.

## (FIRST HALF.)

Percentage completed as applied to *Insurance*, Commission and Brokerage, Stock Investments, Bank Discount, Taxes. (Suggestions, pp. 201 and 202).

## (SECOND HALF.)

Simple Proportion, Square Root, Application of Square Root to the Right Angles, Fundamental rules, short methods in multiplication and division. Strengthen weak points. (Suggestions, pp. 202 and 203).

## EIGHTH YEAR.

Review Arithmetic two days per week.

(FIRST HALF.)

U. S. Money, Fractions (Com. and Dec.), Denom. Numbers.

(SECOND HALF.)

Remaining Topics.

## ALGEBRA.

(See Manual, pp. 203 to 208).

Three days per week.

(FIRST HALF.)

To Simple Equations.

(SECOND HALF.)

Simple Equations Finished.

## BOOKKEEPING.

(See Manual, pp. 208 and 209).

## DRAWING.

As directed by the Supervisor of Drawing.

## GEOGRAPHY.

THIRD YEAR.

(FIRST HALF.)

These topics should be taught regularly through observation and conversation lessons. (See Nature Studies, 3d year).

### HOME GEOGRAPHY.

Observation of neighborhood. Structure.—Forms of land, forms of water, earth materials, location and direction.

Hill.—Base, slopes, summit, hill range, hill system.

Mountains.—Base, slope, summit, peaks, mountain range, mountain system, volcanoes (crater, lava). How represented.

Plains.—Fields, woods, meadows, swamps, plains, deserts (oases).

Valley.—Table land, high lands, river valley, low lands. (See Nature Studies, 3d year).

Plans of school room, school yard and vicinity of school house, moulded and drawn.

#### (SECOND HALF.)

Teach Geographical ideas, based upon observation, using geographical language; bodies of land, bodies of water, projections of land and indentations of water, climate (weather), soil, productions, drawing and moulding map of neighborhood.

#### BODIES OF WATER.

1. Spring.—How formed, pure water, mineral, hot.
2. Brook.—Source, branches, bed, current, channel, mouth, water shed.
3. River.—Source, branches, banks (right, left), bed, current, channel, water-falls, mouth, uses (draining, manufacturing, commerce), river system, river basin, water-shed.
4. Pond.—System, basin, shore.
5. Lake.—System, basin, shore.
6. Ocean.—Sea, gulf, bay, strait, channel, sound.
7. Coast.—Beach, cliffs, bluffs.
8. Projections.—Cape, promontory, peninsula, isthmus.

Temperature.—Hot, cold, temperate.

Soil.—Loamy, sandy, clayey, fertile, arable, barren.

#### PRODUCTIONS.

1. Plants.—Food, clothing, building materials (houses, ships, utensils), fuel, medicine, oils and dyes.
2. Animals.—Food, clothing (furs, skins, leather), labor, utensils (ivory, bone).

3. Minerals.—Fuel, food, building materials, (houses, ships, utensils).

Conversation and Language lessons. (Suggestions, pp. 212 and 213.)

#### FOURTH YEAR.

##### (FIRST HALF.)

Earth as a whole ; form and motions, hemispheres, circles, bodies of land, bodies of water, climate, productions, commerce. Study map of the world. Ask for jointed globe.

1. Form of the earth.—Illustrated with globe, clay or croquet ball, flattened at two opposite sides.

2. Motions of the earth.—Use wooden needles for axis and teach effects of rotation and revolution.—Teach only most general and simple facts. Teach equator, poles and hemisphere.

3. Land and water hemispheres.—Draw a line around a globe so as to show the pupils that most of the land is in one hemisphere and most of the water in the other.

4. Northern and southern hemispheres.—Show with a globe the relative amount of land and water north and south of the equator.

5. Eastern and western hemispheres.—Why called old and new worlds.

6. Bodies of land.—The names, relative size and position of the continents taught from a globe. Lead pupils to see similarity and difference in shape and character of outlines.

7. Bodies of water.—Teach relative size and position of the oceans from a globe. Lead pupils to see which are in the eastern and which in the western hemispheres.

8. Climate.—Hot, cold and temperate sections.

9. Productions and Commerce.—Have a few of the principal productions named and the climate and localities in which they are produced, described. Give the pupils some ideas of commerce, both domestic and foreign, by showing how and to what places the various productions are carried.

## (SECOND HALF.)

Preparatory work reviewed and continued. People, races, occupations, governments, religions, states of society. Draw and study map of Newark, with reference to the following topics :

Draw to a definite scale and locate principal streets and buildings.

## PEOPLE.

1. Races.—Caucasian, Mongolian, Malay, African, American.
2. Peculiarities.—Size and form of body; form of head and features ; color of skin ; kind of hair ; character.
3. Occupations.—Agriculture, fishing, mining, manufactures, commerce (exports, imports).
4. Government.—Republic, monarchy (absolute, limited). Necessity for; where found; necessary departments.
5. Religion.—Pagan, Jewish, Christian, Mohammedan.
6. States of Society.—Savage, half civilized, civilized.

## FIFTH YEAR.

## (FIRST HALF.)

Study of North and South America by topics.

Map Drawing.

Study of a Continent :

1. Position on globe; show what part is hot, cold, temperate; direction from other continents.
2. Relative size compared with other continents.
3. Outline: Character of coast line compared with other continents; principal indentations; outline drawn by pupils.
4. Mountain systems : approximate length and width; comparative height; direction of slopes.
5. Principal rivers and lakes (a few of the largest); source and mouth; relative length.

6. Most valuable productions: where obtained.
7. Important countries: position in continent; comparative size.
8. Best known cities: position; comparative size.
9. People: races; occupations.

Topical arrangements:

1. Position: surrounding water and land; latitude; zones.
2. Contour: comparative shape; regularity of coast line.
3. Size: compared with other continents.
4. Surface: *a.* Highlands—mountains, plateaus. *b.* Lowlands—valleys, plains.
5. Inland Waters: large lakes and rivers.
6. Climate: comparative temperature and moisture.
7. Productions: vegetable, animal, mineral.
8. People: races, employments, customs, government.
9. Political Divisions: countries, large cities.

(SECOND HALF.)

Study of Europe, Asia, Africa and Australia by topics, using the previous order.

SIXTH YEAR:

(FIRST HALF.)

Studies of countries and sections of North and South America, United States, West Indies, British America and Brazil by topics.

Map Drawing.

Mathematical and physical features of the earth as a whole:

1. Form of the Earth: its four proofs.
2. Motions of the Earth: rotation, axis, poles, equator, effects of rotation.
3. Revolution: evidences, effects of revolution, tropical and polar circles, causes of location, zones, parallels, meridians, variations in day and night in different parts of the earth.



## (SECOND HALF.)

Study of sections of U. S. topically. Special attention to Middle Atlantic States and New Jersey.

Map Drawing.

Mathematical and physical features continued:

1. Latitude and Longitude: length of degrees on large circle and small circle; latitude, measured where and from what; longitude, measured where and from what; difference in longitude with reference to time.
2. Land Surface: formation of continents; coral formation; volcanic effects; causes of depression and elevation of surface.

## TOPICS:

1. Position: boundaries—land and water; latitude, longitude, zone.
2. Size: length and breadth; relative size.
3. Surface: highlands — mountains (systems, ranges, peaks, volcanoes); plateaus; lowlands—plains, interior, coast.
4. Drainage: water partings; rivers—source, direction, principal branches, uses; lakes—location, salt, fresh.
5. Climate: kind—temperate, moisture, healthfulness; causes—latitude, elevation, currents (air, water), nearness to sea.
6. Productions: fertile and barren sections; mineral, vegetable, animal.
7. People: races; occupations—agriculture, manufacture, commerce (domestic, foreign; exports, where sent; imports, from what place; means, railroads, rivers, etc.); manners and customs; education; government; religion.
8. Political Divisions: states—important cities and towns; for what noted.

## SEVENTH YEAR.

## (FIRST HALF.)

Studies of countries and sections by topics.

British Empire, France, Germany, Italy and Russian Empire.

Map Drawing.

Mathematical and physical features of the earth as a whole continued.

## (SECOND HALF.)

Important features of the countries of Asia, Africa, Australia and principal islands of the Pacific.

Mathematical and physical features continued:

9. Climate: formation of dew, mist, fog, cloud, rain, snow, frost and hail; amount of rain; how affected in different parts of the earth; temperature—depends upon what.
10. Soil (sub soil): fertility—depends upon what? degree of fertility; adaptation of different plants to soil.

## EIGHTH YEAR.

During this year there should be a careful study of such parts of the previous work as may need review. In addition, the following

## COMMERCIAL CITIES

are to be studied:

## (FIRST HALF.)

New York, Chicago, Boston, New Orleans, San Francisco, Rio Janeiro, London, Liverpool, Glasgow, Paris.

## (SECOND HALF.)

Berlin, Genoa, Venice, Constantinople, Calcutta, Canton, Tokio, Melbourne, Cairo.

## POINTS FOR STUDY:

Location: where; why; growth and population; commercial importance; principal exports and imports; routes from New York; historical importance.

## HISTORY AND CIVICS.

## FIRST YEAR.

Stories selected from mythology, fable, romance, poetry—adapted to the capacity of the pupil—should be told by the teacher.

Stories are more interesting when accompanied by pictures of persons and places, or illustrated by rough sketches upon the blackboard.

Books recommended for use of teachers:

The Childhood of the World (Clodd); The Seven Kings of the Seven Hills (Lairy); Greek Heroes (Kingsley); German Popular Tales (Grimm); Fairy Tales, first series (Stickney); Stories of the Old World (Church); Folk Stories and Fables (Scudder); Myths of Hellas (Coh); Wonder World Stories (Polke); The Three Greek Children (Church); Golden Book of Choice Reading (Swinton); Wonder Book (Hawthorne); Tanglewood Tales (Hawthorne).

## SECOND YEAR.

Continue story-telling and make a study of some of the primitive races.

Use pictures and sketches upon blackboard.

## INDIANS:

*a.* personal appearance: life in tribes, chiefs; *b.* homes: wigwams, how made, fire, how built; *c.* Indian child: dress, cradle, pets, games, toys; *d.* food: how obtained, how cooked; *e.* weapons: material, how made, uses; *f.* occupations: men, women; *g.* modes of travel: canoe, material, how made; *h.* manners and customs: trade, money.

## ESKIMO:

*a.* appearance: dress; *b.* houses: shape, size, how built, how warmed, how finished; *c.* children: life of the child, dress, sports; *d.* food: materials, how obtained, how cooked; *e.* oc-

cupations: men, women; *f.* modes of travel: sledges, how made, how drawn; *g.* boats: how made; *h.* weapons and utensils: uses; *i.* animals: bears, deer, seal, walrus; *j.* country: climate, vegetation, summer and winter, day and night, sunset and moonlight.

Good books for the use of teachers:

The Story of the American Indian (Brooks); Indian History for Young Folks (Drake); Among the Indians (Henry A. Bowler); The Myths of the New World (D. G. Brinton); Manners and Customs of the American Indians (Geo. Catlin); Famous American Indians (Edward Eggleston); Pawnee Hero Stories (Grinnell); Adrift in the Icefields (Hall); Children of the Cold (Schwatka); Polar Worlds (Harting); World of Ice (Ballantyne); Houses and House Life of American Aborigines (Morgan); Nimrod of the North (Schwatka); The Voyage of the Voga (Nordenskold).

### THIRD YEAR.

Continue work of first and second years and take such a view as is suggested by the following topics of Egypt.

EGYPT:

*a.* locate on map and globe; *b.* the people, their color, appearance; *c.* old cities, Thebes, Memphis; *d.* the Nile, how it makes the desert fertile; *e.* the pyramids, how built, the sphinx; *f.* the bondage of the Israelites, the story of Joseph; *g.* how the ancient Egyptians differed from the negro and why; *h.* compare progress of the Egyptians with that of the Eskimos.

Books recommended for teachers:

Popular account of the Ancient Egyptians (Wilkinson); The Story of Ancient Egypt (Rawlinson); Egypt, Descriptive, Historical and Picturesque (Ebers or Samuel Manning).

### FOURTH YEAR.

Have pupils read stories of American history from such books as are suitable for this grade.

Develop facts by questioning. Have pupils tell stories they have read.

Suitable topics for the year.

Stories of the Indians; Columbus and Queen Isabella; The Discovery of America; Captain John Smith, Pocohontas; The Pilgrims; The Quakers; William Penn and the Indians; The Boston Tea Party.

Good books for pupils to read:

Stories of American History (N. S. Dodge); The Boston Tea Party and Other Stories of the Revolution (Watson). American History Stories (Maria L. Pratt).

#### FIFTH YEAR.

TOPICS:

The Northmen; Stories of discovery and settlement; Life in the Colonies; Benjamin Franklin; the Youth of Washington; The First Battle of the Revolution; George Washington and his Army; Stories of the Revolution; The Country after the War.

Suggested for pupils use:

First Book in American History (Eggleston); Pilgrims and Puritans (Tiffany); From Colony to Commonwealth (Tiffany); Stories of American History (Wright); Stories of American History (C. M. Yonge); Stories of American Progress (Wright); Boys and Girls of the Revolution (Woodman).

#### SIXTH YEAR.

The work of this year should chiefly consists of reading some good hand-book of United States History.

The following topics are suggested if there is time:

The Slavery Question; the cotton gin; the steamboat; the railroad; the telegraph; Abraham Lincoln; something about the Civil War.

## SEVENTH YEAR.

History, as a formal study should begin in the Seventh Year. The powers of memory, imagination and reflection, should be cultivated, and the manner of expressing the required facts should receive the closest attention of the teacher.

Topics required:

First half-year.—From beginning, to the War of the Revolution.

Second half-year.—From the War of the Revolution to the Civil War.

Civil Government:

The facts of Local, State and National Government should be taught in this grade as follows:

*a.* What officers are chosen; *b.* by whom chosen; *c.* when and how chosen; *d.* for what chosen.

Several copies of each of the following text books should be supplied to each class room: Sheldon, Barnes, Johnson, Scudder, Eggleston, Montgomery, etc.

## EIGHTH YEAR.

Work required:

First half-year.—Finish history from the Civil War.

Second half-year.—Review History two days per week and read Dole's American Citizen, three days per week, with special reference to principles of State Government.

Legislative department: *a.* Necessity for laws; *b.* Natural right; *c.* Object of laws; *d.* Duties of citizens to respect and obey; *e.* Nature of representation.

Judicial Department: *a.* Penalties; *b.* Justice—free, speedy, impartial; *c.* local administration; *d.* presumption of innocence; *e.* duties of witnesses and court officers.

Executive Department: execution—prompt, vigorous, impartial.

The Constitution: dangers to liberty; safeguard of liberty.

Taxation: its object; just and unjust taxation; instances of each.



## LANGUAGE AND COMPOSITION.

## FIRST YEAR.

## (FIRST HALF.)

Conversational lessons (see pp. 212, 213).

Copy words from board (see Gen. Sug. pp. 216, 217).

Write short lists of familiar words from dictation.

Write short lists of words from memory.

Lead pupils to make simple statements, using words learned in reading. Write these upon the board and have them carefully copied, possibly at another time.

Dictate sentences which pupils have previously given.

Teach use of *this* and *that*, *these* and *those*, in conversational lessons.

## (SECOND HALF.)

Continue exercises suggested for first half.

Teach correct writing of a few proper names.

Supply subjects for simple predicates.

Supply predicates for simple subjects.

Supply simple adjectives learned in reading.

Teach forming of plurals made by adding "s."

Supply subjects for is, are; was, were; has, have.

Supply his, her; is, are; was, were; has, have.

Have filling-in exercises with statements or questions given in previous lessons.

Have pupils make and write two or more consecutive statements or questions about the same thing. Do not allow pupils to form the bad habit of needless repetition of words.

Dictate simple, consecutive statements or questions about the same thing, using pupil's vocabulary. If possible, use familiar words in *new ways*.

NOTE.—Allow no errors of speech, made by pupils, to pass unnoticed.

Each pupil's name should be carefully written upon spaced paper, and pasted upon the slate frame or elsewhere for occasional careful copying *under teacher's supervision*.

## SECOND YEAR.

## (FIRST HALF.)

Necessary drill upon work suggested for first year.

Have lists of words written from dictation or memory.

Have short paragraphs carefully copied from reader.

Write upon the board (*a*) short sentences, (*b*) paragraphs, from reading lessons previously taught, omitting words, the ability to supply which will test points previously studied. (See first year.)

Dictate sentences (declarative and interrogative), utilizing pupils' vocabulary.

Write upon the board sentences so arranged that pupils must supply known words in new relations.

Dictate sentences, stopping at words to be supplied.

Teach writing of name and address, arranged as upon an envelope. Teach names of days of week.

## (SECOND HALF.)

Continue work of first half as needed.

Exercises in use of simple homonyms, *e. g.*, hear, here; ate, eight; to, too, two, etc.

Suffixes "ed" and "ing." Teach for variety of expression and to show difference in time.

Teach "there is," "there are;" here, there.

Dictate from reading lessons and other sources short paragraphs familiar to pupils.

Filling-in exercises with new sentences adapted to review.

Filling-in exercises with sentences pupils have not seen.

Dictate short paragraphs pupils have never seen or heard, adapted to acquired vocabulary.

"Finding" sentences, *i. e.*, constructing sentences from given words.

## THIRD YEAR.

## (FIRST HALF.)

Conversational lessons. (See pp. 212, 213.)

Dictate statements or questions containing proper names and requiring pupils to supply *is, are; was, were, etc.*

Filling-in exercises, *a.* conversational lesson; *b.* oral filling-in; *c.* written; *d.* reproduction.

Continue exercises in sentence-forming; words given.

Use of homonyms.

Lead pupils to see the *use* of nouns, pronouns and verbs as they supply them. Deduce the *names* of these parts of speech from their use, but *require no written definitions.*

Dictation exercises continued.

Oral reproduction of exercises previously used in filling-in or dictation.

Have lists of nouns, pronouns and verbs selected from various written exercises. Drill in quick recognition of these parts of speech.

## (SECOND HALF.)

Continue principal features of other grades.

Simple reproductions: (*a*) oral; (*b*) written. Call special attention to paragraphing and use of quotation marks.

Exercises in supplying, giving *uses* of and selecting adjectives and adverbs. Continue these exercises with nouns, pronouns and verbs. Teach, *er, est, ly*, for variety of expression.

Begin writing from pictures. (See p. 216.)

Simple exercises in writing short letters. Give very careful attention to *correct form.*

## FOURTH YEAR.

## (FIRST HALF.)

Conversational filling-in and dictation exercises, gradually enlarging the scope of the work. (See pp. 213, 214.)

Reproductions: (*a*) reading and other lessons; (*b*) filling-in

exercises used a considerable length of time before; *c.* stories read by teacher or pupils; (*d.*) stories told by pupils or teacher; (*e.*) conversational lessons upon pictures.

Continue letter writing. Insist upon correct form.

Rules for the use of capital letters; abbreviations.

Use of homonyms.

Plurals: *a.* formed by "s" or "es;" *b.* formed by changing *f* or *fe* to ves; *c.* formed when singular ends in *y*.

Teach proper and common nouns. Exercises in giving *use* of, and selecting nouns, pronouns, verbs, adjectives, adverbs. Teach suffixes *er*, *est*, *ly*, for variety of expression.

#### (SECOND HALF.)

Continue all the features of oral and written work given in first half.

Teach irregular plurals; *e. g.*, foot, feet; mouse, mice; child, children, etc. Teach plurals which are like singular.

Oral and written drills in the use of personal pronouns and the correct form of the verb, especially such verbs as *eat*, *take*, *come*, *go*, etc.

METHOD.—Arrange subjects in one column, verb and auxiliaries in another, and object complements and adverbial modifiers in a third, *e. g.*:

I, we,	eat,	my dinner,
you,	am,	yesterday,
Mary,	have,	at one o'clock,
John,	had,	too rapidly,
the boys.	will.	etc.

The teacher points to the subject and to something in the second or third column suggesting the time, and the sentences are given. Oral work before written.

Supplying correct forms of nouns and pronouns.

Teach possessives—forms, not rules.

Exercises in rearranging words which do not make sense.

Teach subject and predicate; teach "clause."

Classify sentences according to meaning.

Direct and indirect quotations; how to write.

## FIFTH YEAR.

### (FIRST HALF.)

Continue conversational lessons (see pp. 212, 213). Use in addition to subjects already suggested (pp. 217, 218): *a.* interesting topics in geography, *e. g.*, the value of coal; *b.* wonders of natural history; *c.* morals taught by reading lessons, etc.

Oral and written summaries (occasionally) of conversational lessons.

Written reproductions of lessons in reading, geography, etc.

Letter Writing: give attention to selection of proper materials, folding, etc. (See p. 218.)

Writing from pictures. (See p. 216.)

Study and use of homonyms and synonyms.

Nouns: define and classify as common and proper.

Pronouns: define and classify as personal, relative and interrogative; use filling-in and dictation exercises in teaching and testing use of correct forms.

Teach terms *preposition*, *conjunction*, *interjection*.

Analyze simple sentences, classify according to use, and state complete subject and complete predicate.

### (SECOND HALF.)

Continue exercises given in first half.

Drill in correct use of possessive forms of nouns and pronouns, filling-in and dictation.

Drill in correct use of objectives.

Correct use of *sit* and *set*, *lay* and *lie*, *learn* and *teach*.

Comparison of adjectives and adverbs.

Exercises in choosing and correctly placing adjectives and adverbs.

Sentence forming, following given conditions.

Exercises in expansion, *e. g.*: the boy broke a window. Expanded: the *careless* boy broke a *costly church* window.

NOTE.—Have the sentence, as given and as expanded, analyzed (as directed in first half). Have pupils name the parts of speech introduced. At first, the words to be inserted may be suggested, the place only being determined by pupils; later, pupils should suggest and place words.

Pupils should leave this grade with a thorough understanding of the *use of capitals, ordinary punctuation and paragraphing*.

## SIXTH YEAR.

### (FIRST HALF.)

Dictation, reproduction, writing from pictures. (See pp. 214 to 216, inclusive.)

These exercises should be so arranged as to test the technics taught thus far. The work done in other studies should be utilized as suggested heretofore (see fifth year). They may be given less frequently than before, in order that attention may be given to

### ORIGINAL COMPOSITION:

Confine this work in this grade to (1) Narration; *a.* brief description of places visited; *b.* brief description of personal experiences; *c.* brief descriptions suggested by certain words; *d.* reproduction of simple stories of American history; *e.* outlines of stories read out of school. (2) Description: *a.* geography; *b.* elementary science. (3) Letter Writing: character and outline sometimes given.

Teach peculiarities of forms (*i. e.*, exceptions to general rules), for nouns and pronouns, *e. g.*, some nouns ending in "o," form their plural by adding "es."

Review modifications of nouns and pronouns; declension.

Continue exercises in expansion. Give sentences requiring *thought, e. g.*, the wind scattered the leaves. The (high) (au-



tumn) wind scattered the (dry) leaves (in every direction) (along the street) (about the lawn), etc. (See note to second half, fifth year.)

(SECOND HALF.)

Continue work suggested for first half.

Teach modifier (adjective or adverb) to use after *look, feel, smell*, etc. Teach correct use of prepositions in, into, at, to, between, among, with, of, from, etc. Teach the term *phrase*.

Review classification of sentences according to *use*. Teach classification according to *form*.

Analysis of sentences:

Mr. Jones, the wealthy merchant living on Prospect St., gave a fashionable reception last evening.

Form of analysis:

This is a simple sentence because, etc. It is a declarative sentence because, etc. The subject is, "Mr. Jones, the wealthy merchant living on Prospect St." The word-subject, "Mr. Jones," is modified by the adjective element, "the wealthy merchant living on Prospect St." The word-predicate, "gave," is modified, etc.

NOTE.—Show by illustrative sentences that a phrase or clause may be used as an adjective or adverb.

Exercises in combination:

(a) Combine a series of simple sentences into one simple sentence. (b) Combine several simple statements so as to make a compound or complex sentence. (c) Change compound sentences to complex, complex to simple, etc.

Exercises in inversion.

## SEVENTH YEAR.

(FIRST HALF.)

1. Sentence-forming: expansion, combination, transformation, analysis. (See sixth year.)

2. Modifications of verbs: voice, mode, tense, person, number.

3. Drills in use of irregular verbs (see fourth year). Teach transitive and intransitive, regular and irregular.

4. Synthesis: combine series of short disconnected statements related in meaning, in proper paragraphs forming a connected narrative, etc. Make a study of the changes.

5. Composition: reproduction in prose of poetical narratives; writing from pictures. (See sixth year.)

6. Narration, description: give subjects calling for an exercise of imagination. (See pp. 217 and 218.)

#### (SECOND HALF.)

Review 2, first half. Continue 1, 4, 5, first half. Continue letter writing, dictation, etc.

Drills in correct use of case, forms. (See fifth year.)

*Study choice extracts* from English prose and poetry. Analyze sentences (see sixth year). Dictation of extracts thus studied. *Do not diagram*, except as an aid, to analysis at first.

### EIGHTH YEAR.

#### (FIRST HALF.)

Occasional exercises in dictation, testing technics previously taught. Make selections from best authors. Teach rules of syntax and their application.

Review the verb. Teach participles as forms of the verb resembling adjectives. Illustrate by sentences.

Conjugation of verbs in indicative, subjunctive, imperative and infinitive modes, active and passive voice. [Teach may, can, must, etc., as auxiliaries used with the simple infinitive (to omitted) to express power, permission, etc.]

Composition: continue work suggested for seventh year; reproduction of talks and current events; interpretation of maxims and proverbs; paraphrasing; outlines of books read; minutes of imaginary meetings of societies, etc.

Paragraphic reports of real or imaginary events (accidents, entertainments, etc.)

Advertisements: articles lost and found; help; situations.

Invitations. (See Gen. Suggestions for Written Work, p. 216; also p. 217.)

(SECOND HALF.)

Composition: continue work suggested for first half. Give subjects requiring reflection and argument. Oral composition, guided by black board outlines, should precede written efforts as long as needed.

Review parts of speech and modifications. Teach rules of syntax and their applications.

Exercises in use of words often confounded, *e. g.*, except, accept; proceed, precede; principal, principle, etc.

Study at least one selection of each of the following: Irving, Hawthorne, Longfellow, Lowell, Whittier, Holmes, Emerson.

Study the ordinary figures of speech. (Rhet.)

Review of the sentence.

Essential: subject may be word, phrase or clause; predicate may be complete or incomplete verb; (*a*) elements—subordinate; adjective, adjunct to (subj.)—adverbial, adjunct to (pred.)—word, phrase or clause; (*b*.) use: declarative, interrogative, imperative, exclamatory; (*c*) form: simple, compound, complex.

## MUSIC.

As required by the Director of Music.

## NATURE STUDIES.

### FIRST YEAR.

Teach to recognize and select the prismatic colors. Do not use shades and tints. Lead the pupils to put similar colors together. Use either colored paper or yarns.

Conversational Lessons on pet animals, domestic animals. In the spring, about common insects and birds.

Observation Lessons. Recognize and name common animals; single qualities of the animal, habits and voices; their homes, ways of eating and drinking. *Language*, largely oral. May later copy names, and perhaps make short sentences. This work has two prominent objects, viz.: to develop the perceptive powers and to enlarge and enrich the vocabulary of the child.

This work must not be haphazard, but carefully prepared beforehand. (This work correlates with Language).

## SECOND YEAR.

Observation Lessons. Domestic Animals: parts in order as, head; distinguishing qualities; prominent habits and uses. Insects, recognize and name. Qualities of objects: hard, soft, round, square, smooth, rough, heavy, light, color, etc. *Language*, as in first year. Group sentences into short descriptions or stories. Supplementary, by teacher reading to interest pupils in animals like those observed. Stories to illustrate kindness (Johonnot, J. G. Wood, Wright). Talk about the body; compare the head, trunk, and limbs with the corresponding parts of the animals observed in regard to position and uses. These lessons, largely oral, some written, have the same objects as the first year, and may profitably blend with language and hygiene.

## THIRD YEAR.

Review Color. Teach shades produced by mixing colors, as red and yellow, etc. Do not teach fine distinctions of tint. Practice matching colors and shades by the use of paper and yarns.

Plants—Uses of each part of the plants used for food, especially the common plants. Classification of roots as tubers, bulbs, fruit and vegetables.

Use these in the fall and spring. Others in the winter months.

Teach place and direction below: over, under, right side, left side, etc.

Home Geography properly comes under this head with its molding and drawing illustrations.

#### FOURTH YEAR.

Plants.—Stems, stalks, or trunks; their shapes: triangular, square or round.

Parts.—Bark, wood, fibre, threads, pith.

Color.—Green, red, brown.

Leaves.—Shape, whether oval, oblong, heart-shaped, round, etc.

Color of Leaves.—Green, red, etc.

Parts.—Stem, blade, apex, margin, surface, veins, etc.

Shape of Margins.—Even, wavy, toothed, etc.

From the *common* plants, have the children observe the peculiarities as outlined above and try to find others having the same peculiarities.

Animals, Insects, principal parts only as head, thorax, abdomen, antennæ, eyes, wings, legs. Insects mounted.

Common Animals.—Resemblances and differences in many parts of two animals and differences in one part of many animals.

### NATURAL SCIENCE.

#### FIFTH YEAR.

Plants.—Roots: kinds or resemblances and differences; uses as food, medicine, etc. In spring and summer study flowers, resemblances and differences. Fruits: the development of plants to seed and seeds to plants.

Natural Phenomena (see Geog. Course).—Observe clouds, rain, snow, fog, mist, dew, frost, etc.

Information Lessons.—Habits of animals, wild and domestic.

Uses of Animals.—Living and dead.

Growth and Culture of Articles of Food.—Pay special attention to common articles of vegetable growth.

Group vertebrate animals with reference to certain resemblances, as grass-eating, flesh-eating, gnawing, hoofed, swimming animals, etc.

Make all observations and discoveries of the pupils a prominent part of the Language work. Have them observe, tell what they see, reproduce orally and in writing, and enlarge their vocabulary with new words to meet their expanding needs.

#### SIXTH YEAR.

Observation and Reading. Continue the study of Animals of the several zones: (*a*) by zones; (*b*) habits and values by comparing them with each other.

*Plants*.—Continue study of previous year. Families of plants and their distribution. Study of food products continued. Spices and collecting and labeling specimens. Productions of our own and other countries. Continue study of natural phenomena: sun, moon, stars, evening and morning star, new moon, full, and waning moons.

#### SEVENTH YEAR.

Observation Lessons on the common stones and minerals which may be obtained in our immediate neighborhood, as sand-stone, slate, blue-stone, lime-stone, marble, granite, and such ores as may be easily obtained. Study of crystals.

#### EIGHTH YEAR.

Animals. Distinguishing marks of reptiles, fishes, bird mammals: their geographical distribution and their uses to man. Typical forms of animal life in the sea, such as may be easily obtained.



## PHYSICAL EXERCISES.

### STANDING.

Heels as nearly together as the conformation of the body will allow.

Toes at an angle of sixty degrees; knees straight; body erect on hips and inclining a little forward; *shoulders* square and falling equally; *elbows* near the body; *palms* of the hand turned slightly to the front; *arms* hanging naturally; *head* erect; *chin* slightly without constraint; *eyes* to the front.

### REST.

The teacher allows the pupils to rest from time to time. At the command "In place, Rest," the pupil stands with his weight resting on one foot, with the body and other leg relaxed. If it is desired to return to the position, the teacher says "Class, Attention," when they resume the standing position.

### FACINGS.

Standing Position: Raise the right foot slightly, face to the right, turning on the left heel, the left toes slightly raised. Replace the right foot by the side of the left. The facing to the left is executed on the same heel as the right.

### SITTING.

Sit squarely in the seat, feet placed firmly on the floor; shoulders back, but not touching the back of the chair; head erect, chin drawn down toward the throat; hands clasped on desk or in the lap.

### FLOATING MOVEMENT.

Standing Position: 1. Hands brought to front of body, waist high, palms downward. 2. Back to side with a floating, graceful movement. 3. Bring hands forward, shoulder high. 4. Back to side with floating, graceful motion. 5. Bring hands

face high. 6. Back with same motion. 7. Bring hands together over the head. 8. Return the hands to the sides with the same motion as before; repeat in reverse order, overhead, face high, chest high, waist high; end in position at last count.

1. Arms raised slightly in front, palms down. 2. Turn palms over and back eight counts; at eighth count return hands to side; arms raised waist high and hands turned as before; at eighth count return hands to side. 3. Arms raised to level of the shoulder and hands turned as at first, arms returning to side. 4. Arms raised over the head, and motions repeated as before; repeat the movements in reverse order.

1. Extend both arms, rigid, to the front, thumbs up. 2. Move arms back, shoulder high, as far as possible. 3. Return hands to the front. 4. Bring hands to side; repeat four times.

1. Both arms rigid, raised shoulder high, palms down. 2. Bring the arms, still rigid, to front of body. 3. Back to first position. 4. Arms raised over head and hands turned so that the tips of the fingers will touch. 5. Back to side; reverse the movement and return to position; repeat four times.

1. Arms extended at side of body, shoulder high, rigid, palms down. 2. Shake both arms and hands quickly, wrist and hands relaxed during eight counts; at eighth count bring the hands to the side; this movement is entirely in the shoulder, not in the elbows; hands and wrists relaxed; it may be continued for sixteen counts, if desired.

Revolving Motions: 1. Arms extended in front, palms down. 2. With relaxed wrists and hands, rotate the arms in circles, rapidly; this movement, like the preceding, may continue for eight or sixteen counts; at last count return to side.

Pulling motion: 1. Arms extended in front of body, shoulder high, palms downward. 2. Bring the hands back to side of shoulder, closing and turning hands and pulling hard. 3. Bring hands to front. 4. Return to side; repeat four times.

Stretching Motion: 1. Arms extended in front of body, hands clenched, right hand resting on left, so that the little

finger of the right hand touches the thumb of the left; elbow bent and close to the side. 2. Raise right arm diagonally up and left hand diagonally down, as if stretching an elastic; make the arms rigid. 3. Bring arms back to first position, left hand on right hand. 4. Reverse the movement, left hand diagonally up and right hand down; repeat the movement for eight or sixteen counts.

### BREATHING EXERCISES.

Standing Position: 1. Hands on hips, thumbs front. 2. Inhale while the teacher lifts her hand or counts. 3. Exhale while the teacher drops her hand or counts. 4. Bring arms to side; repeat four times or eight times.

The same movement, but the pupil raises himself upon his toes during inhalation, and brings his heels gently to the floor while exhaling; repeat four times.

Standing Position: 1. Bring arms slowly to the level of the shoulder, inhaling at the same time. 2. Drop the arms slowly, exhaling at the same time. 3. Raise arms as before. 4. Drop arms as before; repeat for eight counts.

Repeat the last movement, adding rising on toes during inhalation and descending during exhalation.

These exercises do not interfere with the use of the many devices of the teacher, designed to secure the close observation of the pupils or to give them needed rest and relaxation. Many of the exercises laid down for more advanced pupils may be introduced at the discretion of the teacher.

### PHYSICAL EXERCISES.

Designed for the grades between the Third and Eighth years.

The following exercises are drawn from Anderson's Light Gymnastics, and are designed to remedy common and noticeable defects in the position of the *head, arms, body* and *limbs*, caused by deficient or by unequal development of the muscles

which give power and direction to the various parts of the body. These defects are not organic, *i. e.*, are not the result of disease, but are due to the causes mentioned above. Among these defects may be mentioned the following:

Head.—Drops forward; carried a little to one side; chin raised too high.

Shoulders.—Round, stooping, sloping and uneven; one lower than the other.

Thorax.—The diameter at the base too short; one side better developed than the other.

Shoulders.—Right shoulder blade too prominent in right handed people.

Spine.—Side or lateral curves; bends too far forward from between the shoulders.

Waist.—Too narrow; abdominal muscles weak.

Hips.—Thrown too far forward.

Arms.—Forearm better developed than the upper arm.

Leg.—Better developed than the thigh.

Thigh.—Inside and back poorly developed.

This arrangement of exercises will be found serviceable in remedying these defects. They are the a b c's of future gymnastic acquirements, if the pupils desire to make further progress. They are believed to be practicable in our school-rooms, and teachers can find a full exposition of the *how* and the *why* in the book named above, viz.: Anderson's Light Gymnastics, published by Maynard, Merrill & Co.

These exercises also are a thorough preparation for the use of wand and dumb-bells, and a full and attractive development of these exercises is given in this book.

### LIGHT GYMNASTICS.

The following series are given as practice exercises. Different combinations will be given in other series which will follow.

In executing these movements the pupils will take position of attention as follows:

Heels on the same line and as near together as the conformation of the body will permit. Feet turned out an angle of sixty degrees. Knees straight. Body erect on the hips, inclining a little forward. Shoulders square and falling equally. Elbows near the body. Palms of the hands turned slightly to the front, arms hanging naturally. Head erect, chin slightly drawn in without constraint, eyes to the front.

Music (where used), ninety to the minute, or march time.

Unless otherwise stated, each alternate movement will be repeated four times. Movements together, will be repeated eight times.

1. Bring the right hand to hips (the thumb and elbow well back) four times. Bring the left hand to the hip in the same way, four times. Repeat the same with both hands in the same way, eight times. Return to *position, attention*.

2. Bring the right hand (closed) to the chest. Left hand the same. Both hands the same. Return to *attention*.

3. Bring the right hand to the shoulder, tips of the fingers touching the shoulders. Left hand the same. Both hands the same. *Attention*.

4. Swing the right hand rigid (shoulder high) to the right. Left hand the same. Both hands the same. *Attention*. Also drill the pupils in swinging the arms in the oblique and front directions—hip-high, shoulder-high and head-high.

5. Swing the right arm rigid, front and up. Left arm. Both arms. *Attention*.

6. Bring the right hand palm down to the left shoulder; left hand to the right shoulder; both hands. *Attention*.

7. Fold the arms in front, eight times. *Attention*.

8. Fold the arms back, eight times. *Attention*.

9. Swing the hands up sideways and clasp on top of the head (keep the elbows back), eight times. *Attention*.

10. Flex the arms forcibly—palm of the hand front, elbows well back—eight times. *Attention*.

## LEGS AND FEET.

1. Keep the toes on the floor, but raise the right heel by bending the knee; same with the left heel; eight times each. (Do not in this exercise permit the hips to droop).

2. Keep the heel on the floor, raise the toes and twist the right leg to the right; to the left; same with the left; four times.

3. Flex the right thigh until it is parallel with the floor, point the toes down; same with the left; four times.

4. Flex the right leg, keeping the thighs parallel to each other, point the toes back; same with the left.

5. Swing the right leg in these directions eight times each; front, sideways, back returning in the reverse order; swing the left leg in the same way. (Toes pointing downward.)

6. Take the hopping motion on each leg, on both legs and alternate. The alternate motion can easily be turned into a "Run-in-place."

A hopping motion is executed on one leg. It consists in leaping lightly from the floor two or three inches (up and down) alighting and starting from the same foot. The knee should always be bent in alighting. Hands should be on the hips.

7. The stamping motion with the right foot; same with the left foot; eight times. This motion is made by raising the foot two or three inches from the floor, and bringing it down squarely so that both the ball and the heel touch the floor.

## BODY MOVEMENT.

1. Bend the body forward, to each side, and back; also in the oblique directions; eight times each.

2. Turn the shoulders to the right; to the left; eight times each.

3. Roll the body from left to right and from right to left; eight times each.

4. Take the same exercises for the head as for the body. If any pupil should become dizzy from the head motion such pupil should be excused for that time.



## FREE GYMNASTICS.

## (FIRST SERIES.)

Position as before, except that the hands should be placed on hips, thumbs forward.

1. Raise upon the toes sixteen times.
  2. Raise upon the heels sixteen times.
  3. Bend the body forward eight times.
  4. Bend the body to the right side eight times.
  5. Bend the body to the left side eight times.
  6. Bend the body back eight times.
  7. Drop the head to the right twelve times.
  8. Drop the head to the left twelve times.
  9. Drop the head back eight times, at the same time bring the hands to the chest.
  10. Thrust clinched hands down eight times.
  11. Thrust clinched hands out toward side eight times.
  12. Thrust clinched hands up eight times.
  13. Thrust clinched hands front, shoulder high, eight times.
- At the eighth count drop the hands to the sides.

14. Bend right knee, keeping the toes on the floor, eight times.
15. Bend the left knee, toes to the floor, eight times. On the eighth count, flex the arms, keeping the elbows to the side, palms front, hands open, fingers apart.

16. Open and close hands sixteen times. On the sixteenth count let the hands fall to the sides.

17. Stamp the right foot lightly sixteen times.
18. Stamp the left foot lightly and clap the hands sixteen times.

19. Stamp the left foot lightly, clap the hands and count aloud, sixteen times.

Exercises 17, 18 and 19 are for small children and are designed especially to teach them to keep time and to mark time.

## (SECOND SERIES.)

Waltz time, eight counts to each movement. Position, Attention, but hands resting naturally at the side.

1. Step right foot diagonally forward to the right.
2. Same with left foot to the left.
3. Right foot diagonally back.
4. Same, with left foot.
5. Swing right foot forward in front of left, touch toes to the floor and bring back.
6. Same, with left foot.
7. Swing the right arm, sidewise and slightly over the head, palm down, arm curved.
8. Same, with left arm.
9. Same, with both arms; as the hands come down on the last count clasp the hands below in front, palms down.
10. Step right foot diagonally back and across the left; touch only the toes to the floor, incline the body slightly forward (bowing motion).
11. Same, with the left foot.
12. Swing the clasped hands above the head, and step right foot across in front of the left; incline the body slightly to the right.
13. Same, with left foot; incline the body to the left.

## (THIRD SERIES.)

March time, each movement eight times. Position, Attention, with hands resting on hips, fingers back.

1. Raise right foot back, keep knees together.
2. Same, with left foot.
3. Raise right knee front, toes pointing down, bending the leg, body erect.
4. Same, with the left knee.
5. Swing right leg (rigid) to right side.
6. Same, with the left.
7. Twist shoulders to right, do not bend legs or raise the feet.

8. Same, to left.
9. Turn head to the right.
10. Same, to left.
11. Drop head back, hands at side, on the eighth count.
12. Force the head back, trying to touch the chin to the throat.
13. Shrug the right shoulder on count *one*, On count *two* raise the right arm (rigid) shoulder high to side and lower it. On count *three* shrug shoulder. On count *four* raise the right arm again, and so on through sixteen counts.
14. Same, with left arm.
15. Same, with both arms.
16. Raise right arm (rigid) shoulder high to the front, swing sharply to the right side, shoulder high, back to front, down to side, palm up. This movement takes four counts; repeat to sixteen counts.
17. Same, with the left hand.
18. Raise both arms to the front, swing to side, shoulder high, and on counts *three* and *four* slap the hands smartly together back of the body, below the waist. Take this for sixteen counts.

(FOURTH SERIES.)

Position, that of a soldier. These movements are well adapted for drawing the shoulders back and producing an upright position or carriage of the body. Take each exercise for sixteen or thirty-two counts.

First exercise. Count *one*, swing the arms sideways, (the hands can be slapped in this movement). On count *two* force the arms to the same position as in Exercise 10. Practice movement, *i. e.*, elbows well to the side, hands clinched and drawn up close to upper arm. On count *three*, thrust the arms back to position of first count. On count *four*, force the arm obliquely back and down.

Second exercise. Raise the arm from the side, extend to

the full length till the palms meet above the head, palms toward the front, fingers pointing upward, thumbs locked, right thumb in front, the shoulders pressed back. *Two*, bend over, if possible, till the hands touch the floor, keeping the arms and knees straight. *Three*, come back to the first position. *Four*, hands at side.

Third exercise. *One*, extend arms horizontally to the front, palms touching. *Two*, throw the arms extended well to the rear, inclining slightly downward, at the same time raise the body upon the toes. *Three*, come to position as No. 1. *Four*, resume the position of the soldier.

Fourth exercise. On count *one*, raise both arms, (rigid) shoulder high to the side, palms up. On counts *two* and *three*, make short circles from front to rear with the arms. This has been called "grinding the shoulders." On count *four*, force the hands down to the side, palms front. Do not let the hands bound away from the thighs.

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## PHYSIOLOGY.

### ORAL LESSONS.

(FIRST YEAR.)

The teacher will call the attention of the children to their bodies, as a whole; what they can do with them, as: Walk, run, jump, throw the ball, toss the marble, hold the book, slate or pencil, write with the pencil, eat with the fork, spoon, etc.

The teacher will be very careful not to tell the pupil too much, but lead him to find out for himself, by observation and examination of the parts under consideration.

These lessons should not exceed eight or ten minutes at one time. The teachers will be inclined to hurry over the work as simply a memoriter lesson. Caution.—Proceed slowly, care-

fully and objectively, with many illustrations given by the pupil and the teacher.

Now, take up the parts of the body, as the head, neck, trunk, legs, arms, hands, feet, eyes, ears, nose, mouth, tongue, teeth, joints, skin, flesh, etc. Notice incidentally the most obvious uses, or such as the child can readily discover and describe.

**BREATHING**—Have the children notice how they take in breath and how they let it out, and the difference between a deep full breath and one from the top of the lungs. Have them notice that they breathe mostly through the nose. Call attention to the fact that they breathe all the time, whether they think about it or not, while they are asleep as well as when they are awake. Notice that what they breathe surrounds them on all sides, fills the rooms and is found everywhere, and that it is called the air or atmosphere.

**DRINKING**.—What we drink, how and why; right time and wrong time to drink. Constantly direct the attention of the pupils to their own habits in this matter, and lead them to see how they can correct wrong habits.

**EATING**.—What they eat, how and why; right time and wrong time to eat; right way and wrong way to eat. Always have the pupils notice their own habits in eating, as fast eating, slow eating, careless eating, etc.

**CLEANLINESS**.—Why desirable and necessary; cleanliness of the body, of the clothing, of the school room, of the home. Lead the pupils in a careful and discreet manner, to notice their own habits in this matter, and how best to correct improper ones.

The teachers are again reminded that these lessons should be made exercises of observation rather than merely memory lessons.

(SECOND YEAR.)

Same work as for the first year, with such additions and details as the pupils can readily discover and comprehend.

The teachers will not advance in any part of the work faster

than the children can by personal and well directed observation discover, note and apply what is found out and taught. Remember, teachers, the best book from which to learn physiology, is the body.

Correct Position in Sitting and Standing.—A daily exercise in these positions.

BREATHING.—Continue the breathing exercises with the mouth closed; long and full inspiration and expiration. Call attention to the atmosphere around them; importance of fresh air; to avoid drafts.

DRINKING.—As in first year. Try to form correct habits of drinking.

EATING.—What they eat, how and why; right and wrong time to eat. Try to teach them to form correct habits in eating.

Teeth and cleanliness of person.—Why desirable and necessary; cleanliness of the body, hands and face, of the clothing, of the school room, and of home. Lead the pupils to notice their own habits and to correct them.

#### (THIRD YEAR.)

Continue the work of the previous year using the same topics with such additions as the pupils may readily discover and comprehend.

Give special attention to mastication, and the injurious effects of using tobacco, chewing-gum, etc.

#### (FOURTH YEAR.)

Same line of work as for second year, with such additions and details as the age and progress of the pupils will permit, and the skill and discretion of the teacher will suggest.

Give special attention to the parts of the general divisions of the body, as parts of the head, neck, trunk, arms, hands, legs, feet, etc. Call attention to their obvious uses and common abuses.



**BONES AND MUSCLES.**—Lead the pupils to notice that their bodies are made up of hard and soft parts; that the hard parts are the bones and the soft parts are the muscles or flesh. Direct their attention to the uses of the bones and muscles, and how to take care of them.

Through all the grades, use for illustration the physiological charts and such other appliances and objects as the teacher may be able to obtain. The object of these lessons is to acquaint the children with their bodies, and the proper use and care of them, in order to protect their health.

(FIFTH YEAR.)

Take the general line of work indicated for the primary grades, the teacher extending and amplifying the topics as the age and progress of the pupils will permit, and the experience and judgment of the teacher will suggest and direct.

**THE TEETH.**—Their number, location, structure, use, abuse and care.

**THE DIGESTIVE PROCESS.**—Its use, abuse and care. I would constantly remind the teachers of the importance, to the pupils and themselves, of personal observation of the parts and organs under consideration, teachers using the books furnished, or any others they may have access to, for guidance and aid in furnishing the information needed.

**HYGIENE.**—The common or obvious laws of health.

(SIXTH YEAR.)

Follow the line of work indicated for the fifth year, extending it as the child progresses.

**RESPIRATION.**—Take up the respiratory organs. Call attention to their location, structure, use and abuse. Emphasize the importance of properly exercising them, and how. Dwell upon the necessity of pure air and plenty of it; also upon the evils of cramped or improper positions of the body affecting these organs.

## (SEVENTH YEAR.)

Follow the line of work on the same plan suggested for the sixth year, the teacher guiding the observations, suiting the instruction and the illustrations to the progress and advancing age of the pupils.

**BLOOD.**—Call the attention of the pupils to the fact that it pervades all parts of the body. This may be shown by slightly pricking, with a fine-pointed needle, any part of the body, when blood will flow. Call attention to the heart; its beating, and to the fact that it is the pumping engine of the body; also to the arteries and the veins, as the channels through which the blood passes to all parts of the system and back again to the heart. Direct the attention of the pupils to the fact that it is through the blood that our bodies are nourished by the food we eat, and that the quality of the blood depends upon what we eat and the air we breathe.

**HYGIENE.**—Continue the studies of the laws of health. Always lead the pupils to observe their own habits, that they may see wherein they conform to or violate these laws.

## (EIGHTH YEAR.)

Continue the work of the seventh year, extending the work as the pupil progresses.

**THE NERVOUS SYSTEM.**—Lead the pupil to notice the fact that all these organs and the machinery of the body are for the use of the mind, and that the use of the nervous system is to establish a working communication between the mind and the body. Call attention to the use of the senses as the channels of communication from the outer world to mind; the importance of the proper care and training of these senses.

Show that the nerves extend to all parts of the body, which may be done by the sense of feeling; also point out the general divisions of the system into the nerves of the head, trunk, upper extremities and lower extremities.

Through all the grades, use for illustration the physiological charts and such other appliances and objects as the teacher may be able to command.

Teach how to proceed in case of accidents, as wounds, sprains, sunstroke, drowning, etc.

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## READING.

### (FIRST YEAR.)

Two hundred to two hundred and fifty words in script to be read in short sentences; time, 7 months.

Monroe's Chart and New Primer; time, 3 months.

### (SECOND YEAR.)

Beginner's reader or its equivalent, Part I; time, 3 months.

Alphabet (vowels and consonants).

Beginner's reader or its equivalent, Part II; time, 5 months.

One first reader; time, 2 months.

The alphabet to be recited forward, three times a week.

### (THIRD YEAR.)

Four first readers; time, 6 months.

Three advanced first readers; time, 4 months.

Alphabet as in preceding year, twice a week; hard and soft sounds of *c* and *g*; all the vowel sounds.

### (FOURTH YEAR.)

Four second readers; time, 7 months.

One advanced second reader; time, 2 months.

Supplementary reading; time, 1 month.

Alphabet as in preceding years, once a week; all the sounds of the letters; also, the diacritical marks.

## (FIFTH YEAR.)

Three third readers; time, 6 months.

Two advanced third readers; time, 3 months.

Supplementary grade reading; time, 1 month.

Use of dictionary taught. Have pupils ascertain the pronunciation and meaning of difficult words.

## (SIXTH YEAR.)

One fourth reader.

Reading of poetry; time, 10 months.

Supplementary reading.

Lessons *to be studied* with the aid of a dictionary. Teach synonyms; phonic analysis of words.

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## SPELLING.

See pp. 222, 223 and 224.

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## WRITING.

As suggested on pp. 219 to 222.

## MANUAL OF INSTRUCTION—HIGH SCHOOL.

## COMMERCIAL COURSE—(TWO YEARS.)

1ST YEAR.			
1st Term.	Arithmetic.	Book-keeping; Pen- manship; Commer- cial Correspondence, and Business Forms.	
2d Term.	Arithmetic.		German.
3d Term.	Arithmetic.		German. German or Physiology.
2D YEAR.			
1st Term.	Algebra.	Book-keeping; Com- mercial Law and Cor- respondence; Busi- ness Forms, and Civil Government.	
2d Term.	Algebra.		German.
3d Term.	Algebra.		German. German or Natural Philosophy.

Language Lessons, Composition and Declamation through the Course.

Drawing, optional.

## MANUAL OF INSTRUCTION—HIGH SCHOOL.

## CLASSICAL COURSE—(FOUR YEARS )

1ST YEAR.			
1st Term.	Arithmetic.	Lat. Gram., Lessons.	Physiology.
2d Term.	Algebra.	Lat. Gram., Lessons.	Physical Geography.
3d Term.	Algebra.	Lat. Gram., Lessons.	Physical Geography.
2D YEAR.			
1st Term.	Algebra.	Cæsar.	Greek Grammar and Lessons.
2d Term.	Algebra.	Cæsar.	Greek Grammar and Lessons.
3d Term.	Algebra.	(Latin Prose.)	Greek Grammar and Lessons.
3D YEAR.			
1st Term.	Algebra.	Cicero.	Anabasis.
2d Term.	Geometry.	Cicero.	Anabasis.
3d Term.	Geometry.	Virgil's Æneid. (Latin Prose.)	Anabasis. (Greek Prose and History.)
4TH YEAR.			
1st Term.	Geometry.	Virgil's Æneid.	Iliad.
2d Term.	Trigonometry, or German.	Georgics, Bucolics. Roman History and	Iliad.
3d Term.	Review.	Review.	Review.

Language Lessons, Composition and Declamation through the course.

NOTE.—The classical and scientific pupils of the senior class may omit Geometry and Trigonometry and take German instead.



## MANUAL OF INSTRUCTION—HIGH SCHOOL.

## SCIENTIFIC COURSE—(FOUR YEARS.)

1ST YEAR.			
1st Term.	Arithmetic.	Latin Gram., Lessons.	Physiology.
2d Term.	Algebra.	Latin Gram., Lessons.	Physical Geography.
3d Term.	Algebra.	Latin Gram., Lessons.	Physical Geography.
2D YEAR.			
1st Term.	Algebra.	Cæsar.	Natural Philosophy.
2d Term.	Algebra.	Cæsar.	Natural Philosophy.
3d Term.	Algebra.	Cæsar. (Latin Prose.)	Natural Philosophy.
3D YEAR.			
1st Term.	Algebra.	Cicero.	General History.
2d Term.	Geometry.	Cicero.	Political Economy.
3d Term.	Geometry.	Virgil's Æneid. (Latin Prose,) or German.	Political Economy.
4TH YEAR.			
1st Term.	Geometry.	Virgil's Æneid.	Chemistry.
2d Term.	Trigonometry.	Georgics, Bucolics.	Chemistry.
3d Term.	Review.	Roman History and Review or German.	Geology.

Language Lessons, Drawing, Composition and Declamation through the year.

## MANUAL OF INSTRUCTION—HIGH SCHOOL.

## ENGLISH COURSE—(FOUR YEARS.)

1ST YEAR.			
1st Term.	Arithmetic.	Book-keeping, Penman-	Physiology.
2d Term.	Algebra.	ship and Commercial	Physical Geography.
3d Term.	Algebra.	Correspondence, and	Physical Geography.
		Business Forms.	
2D YEAR.			
1st Term.	Algebra.	Book-keeping, Com-	Natural Philosophy.
2d Term.	Algebra.	mmercial Law and Cor-	Natural Philosophy.
3d Term.	Algebra.	respondence. Business	Natural Philosophy.
		Forms and Civil Gov-	
		ernment.	
3D YEAR.			
1st Term.	Algebra.	Rhetoric, $\frac{1}{2}$ year.	General History.
2d Term.	Geometry.	Political Economy, $\frac{1}{2}$	General History.
3d Term.	Geometry.	year.	General History.
4TH YEAR			
1st Term.	Geometry.	English Literature.	Chemistry, $\frac{1}{2}$ year.
2d Term.	Trigonometry.	English Literature.	Geology, $\frac{1}{2}$ year.
3d Term.	Review.	English Literature.	

Language Lessons, Drawing, Composition and Declamation through the course.

## MANUAL OF INSTRUCTION—HIGH SCHOOL.

## COURSE FOR FEMALE DEPARTMENT—(FOUR YEARS.)

1ST YEAR.			
1st Term.	Arithmetic, $\frac{1}{2}$ yr.	Latin Gram., Lessons.	Physiology.
2d Term.		Latin Gram., Lessons.	Physiology.
3d Term.	Algebra, $\frac{1}{2}$ year.	Latin Gram., Lessons, or German.	Physical Geography.
2D YEAR.			
1st Term.	Algebra.	Latin Gram., Lessons.	Botany.
2d Term.	Algebra.	Cæsar.	Botany.
3d Term.	Algebra.	Cæsar, or German.	Natural Philosophy.
3D YEAR.			
1st Term.	Algebra.	Cæsar.	History.
2d Term.	Geometry.	Cæsar.	History.
3d Term.	Geometry.	Cæsar, or German.	Rhetoric.
4TH YEAR.			
1st Term.	Geometry.	Virgil.	English Literature.
2d Term.	Geometry.	Virgil, or German.	English Literature.
3d Term.	Review.	Astronomy.	English Literature.

Language Lessons, Penmanship, Drawing, Composition and Recitation through the course.

# NORMAL AND TRAINING SCHOOL.

## NORMAL DEPARTMENT.

### COURSE FOR FIRST YEAR.

FIRST TERM.	<p>Psychology. Theory and Practice of Teaching.</p> <p>Training School Practice—Primary Grade Work, including Penmanship.</p>	<p>Literature, including the analysis of selections and studies of American and English authors. [This work to be done critically and supplemented by essay and general composition work by the pupil.]</p>	<p>Physical Geography on the basis of geographical and historical study and teaching.</p> <p>Music.</p> <p>Physical Culture.</p> <p>Drawing.</p>
SECOND TERM.	<p>Psychology. Theory and Practice of Teaching.</p> <p>Training School Practice—Primary Grade Work, including Penmanship.</p>	<p>Literature, including the analysis of selections and studies of American and English authors. [This work to be done critically and supplemented by essay and general composition work by the pupil.]</p>	<p>Physiology and Hygiene as applied to the school room.</p> <p>Music.</p> <p>Physical Culture.</p> <p>Drawing.</p>
THIRD TERM.	<p>Psychology. Theory and Practice of Teaching.</p> <p>Training School Practice—Primary Grade Work, including Penmanship.</p>	<p>Critical reading of Political Economy. To be accompanied with essay and composition work.</p>	<p>Lectures on the Science and Philosophy of Education and the Methods of Instruction to be continued through the year.</p> <p>Music.</p> <p>Physical Culture.</p> <p>Drawing.</p>

## COURSE FOR SECOND YEAR.

FIRST TERM.	Moral Science. Theory and Practice of Teaching. Training School Practice—Grammar Grade Work, including Penmanship.	History of Education, its theories, methods and literature. General History.	Literature as related to General History. Critical reading of Civil Government and General History, continued.	Lectures on the History, Philosophy and Science of Education and the Methods of Instruction. Botany. Music. Physical Culture. Drawing.
SECOND TERM.	Moral Science. Theory and Practice of Teaching. Training School Practice—Grammar Grade Work, including Penmanship.	History of Education, its theories, methods and literature. General History.	Literature as related to General History. Critical reading of Civil Government and General History, continued.	Lectures on the General Principles of School Management. Botany. Music. Physical Culture. Drawing.
THIRD TERM.	Moral Science. Theory and Practice of Teaching. Training School Practice—Grammar Grade Work, including Penmanship.	Review of the General Principles and Methods of Teaching, and School Management.	Literature, including selections from writers in the Fine Arts and Poetry.	Lectures and discussions of educational works and educational questions. Music. Physical Culture. Drawing.

In addition to the above course, each pupil in the Normal and Training School is required to spend at least eight weeks of each year in practical class room work in the Training Department, under the special direction of the City Superintendent and Principal of the Normal and Training School.

## COURSE OF STUDY FOR THE EVENING HIGH SCHOOL.

	COMMERCIAL STUDIES.	LANGUAGE.	MATHEMATICS.	SCIENCE.	HISTORY AND CIVIL GOVERNMENT.
1ST YEAR.	Book-keeping. Penmanship. Commercial Law.	German.	Algebra.  (To simultaneous equations of the first degree).	Physics.  Through electricity.	Constitutional and Political History of the U. S. (Johnston's Book or equivalent). The young women may take Literature instead of History.
2D YEAR.	Book-keeping. Penmanship. Commercial Law.	German.	Algebra.  (Thorough quadratics).	Physics, completed.	English History or French History.
3D YEAR.	Book-keeping. Penmanship. Commercial Law.  On the completion of the third year the pupil will have mastered the principles of Book-keeping.	German.  At the end of the third year the pupil should be able to read simple German at sight.	The Elements of Plane Geometry.	The Elements of Chemistry.	English Literature.



If a student successfully completes any one of the five courses, he shall receive from the Board of Education a certificate. Three of these certificates shall entitle the pupil to a diploma.

The program of recitations will be so arranged that a pupil can pursue three studies simultaneously and will have three recitations a week in each study. In this way, a successful student can win a diploma in three years.

Any member of the school who holds a diploma of the Evening Drawing School, can offer the diploma as the equivalent of one certificate.

The teaching of history should be intimately connected with the teaching of English. By committing to memory historical poems, by reading historical sketches, biographies and novels outside of class work,

## COURSE OF INSTRUCTION FOR THE EVENING DRAWING SCHOOL.

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This course includes Mechanical Drawing, Architectural Drawing, Freehand and Object Drawing, and Ornamental Designing. The course covers three years of six months each.

### DEPARTMENT OF MECHANICAL DRAWING.

#### FIRST YEAR.

(a) Drawing of simple lines for the purpose of acquiring facility and skill in handling instruments. These lines being such as will be of use as the pupil advances, and arranged in a progressive order.

(b) Geometrical forms and constructions, involving at first straight lines, then circular arcs, ending with complex curves. Attention will be given to symmetry, proportion and arrangement. Diagrams not to be copied, but constructed from sketches. The pupils will now begin the measurement and sketching of objects from view.

#### SECOND YEAR.

(a) Much study and practice will be given to measurement and sketches of a great number and variety of objects placed in different positions. Diagrams will be constructed from objects and sketches, and not from copies. Light and shade introduced.

(b) The elements of projection will be taken up. The method will be, making drawings of solid bodies bounded by plane surfaces, the objects being placed in a great variety of positions, proceeding gradually to complex forms and the

problems of intersection and development, the object being to bring clearly before the mind of the pupil the relation between the drawing and the thing drawn.

#### THIRD YEAR.

(a) The drawing of the whole or parts of a machine by actual measurement.

The pupil now begins work as an actual draughtsman. He is required to study the whole or some part of a piece of machinery. This is the most important part of his work at this stage. He must learn to observe closely, read and comprehend a part or the whole of a machine, to measure and sketch it, and finally to make a working draft of it. The accuracy of the drawing should never be sacrificed for the sake of shading or picture making. He should be taught to compose and construct his drawings, rather than to memorize them.

(b) Exercises in planning and designing for the purpose of developing and training the inventive powers and the imagination.

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### DEPARTMENT OF ARCHITECTURAL DRAWING.

#### FIRST YEAR.

- (a) Geometrical forms.
- (b) Lines.
- (c) Plane figures.
- (d) Objects.\*
- (e) Projection.

#### SECOND YEAR.

- (a) Continue projection.
- (b) Introduce light and shade.
- (c) Details and interior finish.
- (d) Simple plans.
- (e) Elements of perspective.

## THIRD YEAR.

- (a) Plans continued.
  - (b) Elevations.
  - (c) Sections.
  - (d) Perspective continued.
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DEPARTMENT OF FREEHAND DRAWING AND  
ORNAMENTAL DESIGNING.

## FIRST YEAR.

From copies and objects:

- (a) Geometrical forms.
- (b) Lines.
- (c) Angles.
- (d) Plane figures.
- (e) Circles.
- (f) Objects.

## SECOND YEAR.

- (a) Drawing from copy.
- (b) Decorative designing.
- (c) Drawing from cast.
- (d) Drawing from forms.

## THIRD YEAR.

- (a) Continue drawing from copies and models.
- (b) Decorative designing.
- (c) Cast drawing.
- (d) Shading.

# COURSE OF STUDY FOR EVENING SCHOOLS.

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## FIRST GRADE.

### READING.

Fourth Reader: History—Higginson's U. S.; Miscellaneous; Language Exercises. In alternation.

### WRITING.

Book-keeping; Business Forms; Correspondence, etc. In alternation.

### ARITHMETIC.

Mental Exercises; Written Exercises; Business Exercises; Original Exercises. In alternation.

### ORAL LESSONS.

Government—Municipal, State, National.

Constitution—State, National.

These lessons to alternate; length 15 to 20 minutes each evening.

## FRIDAY EVENINGS.

First Hour—Drawing.

Second Hour—Miscellaneous Reading and Discussion.

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## SECOND GRADE.

### READING.

Third or Fourth Reader; History—Quackenbos' Elementary United States; Language Exercises. In alternation.

### WRITING.

Copy Book; Business Forms; Correspondence. In alternation.

## ARITHMETIC.

Mental Examples; Written Examples; Business Examples;  
Original Examples. In alternation.

## ORAL LESSONS.

Government—Municipal, State, National.  
Physiology—Structure, Function, Hygiene.  
In alternation.

## FRIDAY EVENINGS.

First Hour—Drawing.  
Second Hour—Miscellaneous Reading and Discussion.

## THIRD GRADE.

## READING.

Second or Third Reader; Exercises in Spelling; Language  
Exercises. In alternation.

## WRITING.

Copy Book; Letter Writing. In alternation.

## ARITHMETIC.

Mental Examples; Written Examples; Business Examples;  
Original Examples. In alternation.

## ORAL LESSONS.

Government—City, State.  
Physiology—Structure, Function, Hygiene.  
In alternation.

## FRIDAY EVENINGS.

First Hour—Drawing.  
Second Hour—Miscellaneous Reading and Discussion.

## UNGRADED CLASS

This class will receive instruction in Reading, Writing,  
Arithmetic, Spelling, Oral Lessons.



SCHOOL BOOKS AND STATIONERY.



## SCHOOL BOOKS AND STATIONERY.

### PRIMARY SCHOOLS.

*Reading.*—Franklin First, First Advanced, New First, Second, Second Advanced, New Second, Third, Third Advanced and New Third Readers; Monroe's Chart Primer and New Primer; Monroe's First, First Advanced, Second, Second Advanced, Third and Third Advanced Readers; Monroe's School Chart; Appleton's First, Second and Third Readers; Appleton's Reading Chart; Swinton's First, First Advanced, Second, Second Advanced and Third Readers; Collard's Beginners' Reader, Parts I and II; Unique Reading Chart, Parts I and II; Goodrich's Child's History of the United States; Werner's Primer.

*Supplementary Readers.*—Ginn & Co.'s Classics for Children, viz.: Æsop's Fables, Kingsley's Greek Heroes, Irving's Sketch Book, Lamb's Tales from Shakespeare; Lippincott & Co.'s Bert's Primer of Scientific Knowledge; Heath & Co.'s Sea Side and Way Side, Parts I, II and III; Ivison, Blake-man & Co.'s Readings in Nature's Book, Seven American Classics, Book of Tales; Appleton & Co.'s Johonnot's Natural History Series—5 Books; Dole's American Citizen; Boston Supply Co.'s Information Readers, Nos. 1, 2, 3 and 4; Montgomery's Beginners' American History; Selections from Riverside Literature Series, viz.: Hawthorne's Tanglewood Tales, Fables and Folk Stories, Hawthorne's True Stories, Dickens' Christmas Carol, Hawthorne's Daffidowndilly and Other Biographical Stories; Autobiography of Benjamin Franklin; Rolf's English Classics; Rupert's Geographical Reader; Oldroyd's Words of Lincoln.

*Language.*—Whitney's Elementary English (Knox).

*Spelling.*—Beecher's Primary Normal Speller; Meleney & Giffin's Selected Words; Reed's Word Lessons.

*Geography*.—Swinton's Introductory Geography; Cornell's Outline Maps; W. & A. K. Johnston's Grand and Imperial Maps.

*Arithmetic*.—Fish's Arithmetic No. 1; Giffin's Number Chart; Gleason's Arithmetical Cards.

*Drawing*.—Prang's Manual of Drawing, Parts I and II; Prang's Primary Course in Art Education Manuals, Parts I and II; Prang's Complete Course Drawing Books, Nos. 1, 2, 3 and 4. Drawing Models, modeling clay, colored paper.

*Oral Lessons*.—Calkin's Primary Object Lessons; Hooker's Child's Book of Nature, Parts I, II and III; Brown's Manual of Commerce; Sheldon's Object Lessons.

*Music*.—Jepson's Standard Music Readers; Song Garden No. 2; The Children's Hour.

*Writing*.—Graphic System of Writing.

*Stationery*.—David's, Stafford's Universal, Dovell's and Pomeroy's Inks; Eagle Pens, Nos. 160, 170, 190, 250, 370 and 410; Pen Holders; Ink Wells; Ink Well Covers; Teachers' Ink Stands; Blotters; Practice Paper for drawing and writing; Slate Pencils; Pencil Holders; Crayons; Slates, 5x7, 6x9 and 6½x10; Numeral Frames; Foolscap and Examination Paper; Mucilage; Perfumed Paste; Thermometers; Lead Pencils; Diamond and Felt Rubber Erasers; Graphic Scrap Books; Rubber Hand Stamps.

*Miscellaneous*.—Webster's International and National Dictionaries; Joslyn's Globes; Hooker's First Book in Physiology; Smith's Primer of Physiology and Hygiene.

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## GRAMMAR SCHOOLS.

*Reading*.—Franklin Third, Third Advanced, New Third, Fourth, New Fourth, Intermediate, Fifth and New Fifth Readers; Monroe's Third, Third Advanced and Fourth Readers; Appleton's Third, Introductory Fourth, Fourth and Fifth Readers; Swinton's Third, Fourth and Fifth Readers; Higginson's

Young Folks' History of the United States; Quackenbos' Elementary History of the United States.

Supplementary Readers.

*Language*.—Whitney's Elementary English (Knox); Hyde's Practical Lessons in use of English, Parts I and II; Hyde's Advanced Lessons in English.

*Spelling*.—Metcalf's Spelling and Language Book.

*Geography*.—Swinton's Introductory and Grammar School Geographies; Cornell's Outline Maps; W. & A. K. Johnston's Grand and Imperial Maps; Tilden's Commercial Geography.

*Arithmetic*.—Fish's Arithmetic, No. 2; Greenleaf's Intellectual Arithmetic; Gleason's Arithmetical Cards.

*Algebra*.—Milne's Elements of Algebra.

*History*.—Eggleston's United States History.

*Drawing*.—Prang's Manual of Drawing, Parts II, III and IV; Prang's Complete Course Drawing Books, Nos. 4, 5, 6, 7, 8 and 9. Drawing Models, modeling clay, colored paper.

*Music*.—Jepson's Standard Music Readers; The Children's Hour.

*Writing*.—Graphic System of Writing; Meservey's Single Entry Bookkeeping.

*Stationery*.—David's, Stafford's Universal, Dovell's and Pomeroy's Inks; Eagle Pens, Nos. 160, 170, 190, 250, 370 and 410; Pen Holders; Ink Wells; Ink Well Covers; Teachers' Ink Stands; Blotters; Slate Pencils; Lead Pencils; Spelling Slates; Slates, 6x9 and 6½x10; Crayons, viz.: Waltham, New York Company's and New York Company's Enameled; Practice Paper for writing and drawing; Foolscap and Examination Paper; Mucilage; Perfumed Paste; Thermometers; 12-inch Rulers; Graphic Scrap Books; Rubber Hand Stamps; Eagle Pencil Co.'s Compasses.

*Miscellaneous*.—Webster's International and National Dictionaries; Fitz's Globes; Joslyn's Globes; Hooker's First Book in Physiology; Smith's Primer of Physiology, the Human Body and Its Health.

## HIGH SCHOOL.

*Mathematics.*—Franklin Written Arithmetic; Greenleaf's Intellectual Arithmetic; Thompson's Commercial Arithmetic; Davies' University Algebra; Davies' Legendre; Wentworth's Shorter Course Algebra; Wentworth and Hill's Mathematical Problems; Seaver and Walton's Franklin Algebra.

*Latin.*—Jones' Prose Composition; Chase and Stuart's Cæsar; Chase and Stuart's Cicero; Chase and Stuart's Virgil's Æneid; Chase and Stuart's Virgil's Eclogues; Pennell's Ancient Rome; Easy Latin Method; Latin for Sight Reading; Tetlow's Lessons; Harkness' First Year in Latin; Harkness' Grammar; Leighton's History of Rome; Kelsey's Cæsar; Daniell's Latin Prose; Gradatim—Ginn & Co.

*Greek.*—Goodwin's Grammar; Jones' Prose Composition; Boice's Xenophon's Anabasis; Goodwin's Xenophon's Anabasis; Boice's Homer's Iliad; Pennell's Ancient Greece; Moss' First Reader; Smith's Smaller History of Greece; Keep's Iliad.

*German.*—Stern's Studien und Plaudereien, Part I; Worman's First Book; Bernhardt's (German) Grammar and Reader; Joynes-Meissner's (German) Grammar; Herman Boisen's (German) Prose; Sheldon's (German) Grammar; Brandts' (German) Reader.

*Natural Science.*—Hooker's Natural History; Dana's Geological Story; Lockyer's Astronomy; Steele's Physics; Eliot and Storer's Elementary Chemistry; Hutchinson's Physiology and Hygiene; Gray's How Plants Grow; Houston's Physical Geography; Avery's Elements Natural Philosophy.

*Language and Literature.*—Gilmore's Art of Expression; Backus' Shaw's English Literature; Hill's Elements of Rhetoric and Composition; Chittenden's Elements English Composition; Hill's Foundation of Rhetoric.

*Music.*—Jepson's Standard Music Readers; The Triumph.



*Miscellaneous.*—Townsend's Civil Government; Wayland's Political Economy, abridged; Webster's International and National Dictionaries; Sandy's Book-keeping; Myer's General History.

*Stationery.*—Same as for Grammar Schools, and in addition blank books for commercial department.

Drawing models; modeling clay; colored paper.

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#### NORMAL SCHOOL.

*Science.*—Porter's Elements of Intellectual Science; Wayland's Moral Science.

*Reading.*—Cathcart's Literary Reader.

*Music.*—The Triumph; Jepson's Standard Music Readers.

*Stationery.*—Same as for Grammar Schools.

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#### EVENING SCHOOLS.

Weineck's Guide to English.



INSTRUCTIONS FOR PREPARING CARDS,  
REPORTS, ETC.



## INSTRUCTIONS.

### FOR PREPARING CARDS, REPORTS, ETC.

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Records of attendance, scholarship and deportment shall be kept in all the Public Schools, in a manner prescribed by the City Superintendent, and in accordance with Article V, Section 11, of the Regulations. These records shall be uniform in all schools of the same grade.

#### RULES FOR KEEPING RECORDS.

*First.*—Any pupil who shall have been present five days during any term, shall be enrolled as a member of the school; and whenever present five days during any one month, shall be considered an enrolled pupil for that month.

*Second.*—When a teacher shall have satisfactory evidence that a pupil has left school, without the intention of returning, such pupil's name shall be immediately stricken from the roll, but any absence recorded against such pupil, before the teacher receives such information, shall remain and shall be regarded as other absences.

*Third.*—When a pupil is suspended from school, by any of the rules of the Board, his or her name shall be stricken from the roll forthwith.

*Fourth.*—When a pupil has been absent from school more than five consecutive days, *for any cause*, his or her name shall be stricken from the roll at the end of five days. The absence, however, shall be recorded while the name remains on the roll.

*Fifth.*—Regular pupils, whose names have been enrolled, but who are not present on the first day of any subsequent term during that year, shall be marked absent.

*Sixth.*—The number of enrolled pupils for each month shall consist of all such as are members of the school for that month, in accordance with the foregoing rules.

*Seventh.*—The average number of enrolled pupils for any month, term or year, shall be found by dividing the whole number of days of *membership* by the number of days of *school* during the month, term or year.

*Eighth.*—The average daily attendance of any class or school, for any period of time, shall be found by dividing the whole number of days the pupils have been *present* by the number of days the school has been open during such period.

*Ninth.*—The percentage of attendance shall be found by dividing the average daily attendance by the average number enrolled.

#### DEPORTMENT CARDS, ETC.

The scholarship and deportment of each pupil shall be marked on his card as follows: Excellent, good, fair, poor, very poor.

The card sent home will show the actual standing of the pupil and should also show the number of days absent and the times tardy, and whether on account of sickness, or otherwise.

#### MONTHLY CERTIFICATES.

Monthly certificates of approbation shall be awarded to the pupils in the grammar and primary schools on the following basis:

The punctuality must be 100 per cent.—no tardiness will be excused. A pupil may be *excused* one day in each month for *sickness only*.

*Attendance.*—A pupil, if absent one day from sickness, will be marked 95 per cent.; if absent one-half day, 97½ per cent.



Such absence does not affect his percentage for scholarship or deportment; for in such cases the sum of the crédits for the month will be divided by 19 or  $19\frac{1}{2}$  instead of 20.

In scholarship and deportment the pupil must receive not less than *good* in all subjects, except writing and drawing, and in these not less than *fair*, to entitle him to a certificate.

#### YEARLY TESTIMONIALS.

At the close of each *school year*, all pupils in the High, grammar and primary schools who have not been *tardy*, nor *absent* more than *ten* days during the *year*, and *that* on account of personal sickness or death in the family of which the pupil is a member, and whose record shall show an average of not less than *good* in all subjects, except writing and drawing, and in these not less than *fair*, for the year, shall receive testimonials for "DISTINGUISHED MERIT."

Pupils transferred from one school to another during the year will take with them a certificate of their record from the school they leave.

In estimating attendance, no absence—*except from sickness*—and no tardiness will be excused.

#### HONORARY PROMOTION AND GRADUATION.

Every scholar who, throughout the school year, up to the date fixed for the annual examinations, shall have averaged "good" shall be promoted or graduate on the certificate of the class teacher, endorsed by the school principal, which certificate shall also certify the ability of the scholar to pursue the studies of the next higher grade.

Provided, that no scholar shall be entitled to such promotion or graduation whose average in any study shall be lower than "fair," and—

Provided, also, that the list of scholars thus promoted or graduating shall be submitted to and approved by the City Superintendent—

And the certificates of such promotion and graduation shall be endorsed, or otherwise designated as "honorary."

No scholar shall be eligible to "honorary graduation" whose "deportment," separately averaged, does not average "good."

All promotions shall be conditioned as follows:

Any pupil who shall fail to sustain "fair" standing in the grade, upon the report of the class teacher to the school principal, and upon the "advice" of such principal, after personal examination of the case, may, with the "approval" of the City Superintendent, be reduced to his or her proper grade—a record of each case, duly attested by the several officers designated, to be kept in the school where same occurs.

REGULATIONS FOR COMBINING THE MONTHLY CARD RECORD  
WITH THE EXAMINATION RECORD IN MAKING UP  
THE STANDING OF PUPILS FOR PROMOTION.

That reading, spelling, arithmetic, language, geography and history, or such of them as are pursued in any class, be averaged in determining monthly averages and promotions.

Those pupils will be entitled to Honorary Certificates who receive an average of "good" in these studies; provided that the average of no study is less than "fair" (writing and drawing will receive this consideration), and provided that the average in deportment is not less than "good."

The mid-year examination will count the same as one month's work.

In determining promotions, the monthly card will be valued as follows:

The average of the monthly averages will be regarded as one element, the average of the mid-year examinations as one element, and the average of the final examinations as one element.

One-third of the sum of these three elements will determine a pupil's standing at the close of the year.

Those who merit monthly certificates must have a record of not less than "fair" in writing and drawing.

All the cards of the eighth grade, except those of the honorary members, will be sent to the City Superintendent of Public Schools on the Monday next preceding the day for final examinations. These cards will contain the records of the pupils to date.

## REGULATIONS FOR THE NORMAL AND TRAINING SCHOOL.

*First.*—Pupils who fail to attend at least 90 per cent. of all the recitations and exercises shall not be permitted to take the examination except upon the written consent of the Chairman of the Normal and Training and High Schools Committee and the City Superintendent.

*Second.*—The examination questions shall be prepared by the teacher of the class subject to the approval of the principal and the City Superintendent.

*Third.*—The standing of each pupil in each subject shall be found by combining the average of the monthly estimates with the examinations, each counting one-half. This result shall be submitted to the City Superintendent for his examination and approval.

*Fourth.*—No recitations shall be held during the period of regular examinations.

*Fifth.*—Every pupil must have a satisfactory record which shall not be less than "fair" in each subject, including observation and practice teaching, to entitle to promotion or graduation.

*Sixth.*—No pupil shall be permitted to continue in the class, whose general average at the close of the half year term falls below "fair," or who fails in three studies, practice teaching counting as one. Any pupil whose average is above "fair," but who has failed in not more than *two* studies, shall be per-

mitted to make up these failures by a reëxamination by a committee to consist of the teachers of the subject, the principal and the City Superintendent. Provided, that pupils who prefer, shall be permitted to fall back one class and take up those subjects in which they have failed and such others as they wish, subject to the approval of the City Superintendent and the principal.

*Seventh.*—Both classes shall devote the entire time to the Normal Department during the first term of the school year—that is, from September to January 1.

*Eighth.*—Each division shall continue four weeks at a time in the observation and practice work, excepting Friday of each week, which shall be given to prescribed work in the Normal Department.

## REGULATIONS FOR THE HIGH SCHOOL.

### GENERAL PROMOTION.

All pupils who have attained an average of "fair" in their studies shall be entitled to promotion at the end of the school year; such average being obtained by estimating the average of the card marks one-half, and the marks of the mid-year and the final examination each one-fourth. Provided, that the average in any study be not below "poor."

### HONORARY PROMOTION.

Pupils who shall have attained an average of "good" in all studies, and not lower than "fair" in any one study, including English and Drawing, shall be entitled to honorary promotion, provided that the department average for the year be not below "good;" such honorary average being obtained by estimating the average of the card marks three-fourths and the marks of the mid year examination one-fourth.

## CONDITIONS.

(a) Any pupil who shall have attained a general average of "fair," but whose standing in any subject at the end of the school year is below "poor," shall not be promoted, but may be conditioned in that subject; such condition to be imposed before the summer vacation, and to be removed by examination during the last week of the summer vacation.

(b) Any pupil whose standing in any study, as determined by the average of the card marks ( $\frac{3}{4}$ ) and the mid-year examination mark ( $\frac{1}{4}$ ) is below "poor," may be conditioned in that subject; such condition to be imposed within ten days after the mid-year examinations and to be removed by examination during the first week of the spring term.

(c) During the term of condition, pupils shall be allowed to continue in the studies of the class to which they belonged before the condition was imposed; in the event of failure to remove the condition, they shall remain ineligible for promotion until all conditions shall be removed.





## STATISTICS.



## CENSUS, 1895.

SCHOOL AGE, FIVE TO EIGHTEEN YEARS.

[Reported to the Board by the State Superintendent of School Census.]

Ward.	No. Children.
First.....	5,895
Second.....	5,135
Third.....	3,197
Fourth.....	5,216
Fifth.....	7,851
Sixth.....	4,046
Seventh.....	10,502
Eighth.....	8,606
Ninth.....	4,186
Total.....	54,634
Enumeration, 1894.....	58,103
Decrease.....	3,469

**TABLE A.**  
**ESTIMATED VALUE OF SCHOOL HOUSES, SITES**  
**AND SCHOOL FURNITURE.**

NAME OF SCHOOL HOUSES.	Value of Sites.	Building and Furniture.	Total.
Normal and Training.....	\$15,000	\$18,000	\$33,000
High.....	25,000	48,000	73,000
Burnet Street.....	25,000	50,000	75,000
State Street.....	10,000	19,000	29,000
Webster Street.....	10,000	25,000	35,000
Washington Street.....	15,000	40,000	55,000
Marshall Street.....	10,000	5,375	15,375
Morton Street.....	7,000	45,000	52,000
Monmouth Street.....	6,000	45,000	51,000
Lawrence Street.....	25,000	45,000	70,000
Commerce Street and Colored....	10,000	14,500	24,500
Chestnut Street.....	10,000	40,000	50,000
Lafayette Street.....	15,000	35,000	50,000
South Eighth Street.....	7,000	40,000	47,000
Thirteenth Avenue.....	18,700	48,000	66,700
Central Avenue.....	10,000	40,000	50,000
Lock Street.....	5,000	6,000	11,000
Warren Street.....	4,800	26,000	30,800
Wickliffe Street.....	6,000	10,000	16,000
Summer Avenue.....	10,000	48,000	58,000
Elliot Street.....	5,000	30,000	35,000
Ridge Street.....	4,800	5,000	9,800
Miller Street.....	10,000	35,000	45,000
Elizabeth Avenue.....	2,500	12,800	15,300
Charlton Street.....	12,600	30,000	42,600
Oliver Street.....	10,000	40,000	50,000
South Street.....	5,000	28,500	33,500
Walnut Street.....	8,000	7,000	15,000
Ann Street.....	7,200	25,000	32,200
North Seventh Street.....	7,500	25,000	32,500
Roseville Avenue.....	4,800	18,000	22,800
South Market Street.....	8,000	30,000	38,000
Hamburg Place.....	6,400	39,500	45,900
Hawkins Street.....	5,000	31,000	36,000
South Tenth Street.....	6,000	21,100	27,100
Camden Street.....	8,000	32,000	40,000
Waverly Avenue.....	9,000	25,000	34,000
Fifteenth Avenue.....	5,400	25,000	30,400
Newton Street.....	10,000	40,000	50,000
Eighteenth Avenue.....	7,000	40,000	47,000
"Franklin".....	15,000	59,000	74,000
	\$401,700	\$1,246,775	\$1,648,475

**TABLE B.**  
**SEATING CAPACITY.**

SCHOOL BUILDINGS.	Grammar Depart- ment.	Primary Depart- ment.	Total.
Normal and Training—Normal Department .....	....	*75	*75
Normal and Training—Training Department .....	....	294	294
High .....	†354	†484	†838
High Annex, Boys .....	†254	....	†254
High Annex, Girls .....	....	†254	†254
Burnet Street.....	383	434	817
State Street.....	....	572	572
James Street.....	....	196	196
Webster Street.....	....	620	620
Washington Street... ..	369	306	675
Marshall Street.....	....	284	284
Morton Street.....	348	776	1,124
Broome Street.....	....	158	158
Court Street.....	....	94	94
Monmouth Street.....	....	960	960
Lawrence Street .....	280	320	600
Commerce Street.....	....	266	266
Colored.....	52	148	200
Chestnut Street.....	376	438	814
Lafayette Street.....	277	540	817
Clover Street.....	....	84	84
South Eighth Street.....	436	396	832
Thirteenth Avenue.....	285	721	1,006
Central Avenue.....	382	404	786
Lock Street.....	....	236	236
Warren Street.....	....	432	432
Wickliffe Street.....	....	296	296
Summer Avenue.....	340	392	732
Elliot Street.....	....	522	522
Ridge Street.....	....	238	238
Miller Street.....	412	408	820
Elizabeth Avenue....	....	360	360
Charlton Street.....	....	480	480
Oliver Street.....	418	352	770
South Street.....	....	672	672
Walnut Street .....	....	368	368

TABLE B—Continued.

SCHOOL BUILDINGS.	Grammar Depart- ment.	Primary Depart- ment.	Total.
Ann Street.....	....	478	478
North Seventh Street (new).....	288	178	466
North Seventh Street (old).....	....	316	316
Roseville Avenue.....	....	360	360
South Market Street.....	277	340	617
Hamburg Place. . . . .	392	372	764
Hamburg Place (annex).....	....	208	208
Hawkins Street.....	....	480	480
South Tenth Street.....	....	930	930
Camden Street.....	....	792	792
Waverly Avenue.....	....	480	480
Fifteenth Avenue.....	....	480	480
Newton Street.....	487	464	951
Eighteenth Avenue.....	418	648	1,066
Livingston Street.....	....	240	240
"Franklin".....	440	464	904
Totals.....	6,660	19,997	26,657

\*Not included in grand totals.

†608 in Male Department; 738 in Female Department; total, 1,346. Not included in grand totals.

Total seating capacity of city, 28,078.



## TABLE C.

## REPAIRS.

SCHOOL BUILDINGS.	Ordinary Repairs.	Extra- ordinary Repairs.	Whole Amount Expended.
Normal and Training.....	\$58 43	... ..	\$132 71
Plumbing.....	.....	\$25 44	.....
Repairing iron railing.....	.....	29 00	.....
New door.....	.....	19 84	.....
High.....	135 66	.....	196 38
Plumbing.....	.....	60 72	.....
High Annex (5 Washington st.)..	89 25	.....	149 45
Plumbing.....	.....	60 20	.....
High Annex (103 Washington st.)	29 09	.....	147 50
Plumbing.....	.....	27 12	.....
Ventilation.....	.....	26 29	.....
Kalsomining.....	.....	65 00	.....
Burnet Street.....	228 37	.....	1,045 30
Painting.....	.....	174 13	.....
New ceilings.....	.....	510 99	.....
Repairing roof.....	.....	16 81	.....
Painting roof.....	.....	115 00	.....
State Street.....	92 38	.....	323 00
Plumbing.....	.....	74 20	.....
New ceilings.....	.....	156 42	.....
James Street.....	2 32	.....	2 32
Webster Street.....	64 91	.....	309 13
New ceilings.....	.....	128 75	.....
Painting walls.....	.....	70 00	.....
Repairing roof.....	.....	45 47	.....
Washington Street.....	244 84	.....	407 21
Plumbing.....	.....	42 25	.....
Artificial stone floor.....	.....	35 00	.....
New fence.....	.....	85 12	.....
Marshall Street.....	53 63	.....	71 63
Plumbing.....	.....	18 00	.....
Morton Street.....	178 18	.....	495 35
New ceilings.....	.....	149 72	.....
Painting.....	.....	39 00	.....
Repairing roof.....	.....	78 00	.....
Repairing iron railing.....	.....	35 00	.....
Plumbing.....	.....	15 45	.....
Broome Street.....	5 33	.....	29 63
Plumbing.....	.....	24 30	.....
Court Street.....	9 40	.....	25 40
Painting.....	.....	16 00	.....
Monmouth Street.....	123 97	.....	207 17

TABLE C—Continued.

SCHOOL BUILDINGS.	Ordinary Repairs.	Extra- ordinary Repairs.	Whole Amount Expended.
Plumbing.....	.....	\$27 00	.....
Flagging.....	.....	56 20	.....
Lawrence Street.....	\$190 71	.....	\$357 37
Painting.....	.....	120 00	.....
Plumbing.....	.....	10 90	.....
Repairing roof.....	.....	35 76	.....
Commerce Street.....	30 15	.....	195 40
Painting.....	.....	15 00	.....
New doors.....	.....	74 32	.....
New flooring.....	.....	41 81	.....
Plumbing.....	.....	34 12	.....
Colored.....	25 37	.....	104 97
New floors.....	.....	57 00	.....
Plumbing.....	.....	22 60	.....
Chestnut Street.....	288 51	.....	407 04
Repairing roof.....	.....	28 67	.....
Painting.....	.....	64 00	.....
New ceiling.....	.....	25 86	.....
Lafayette Street.....	362 46	.....	778 86
Plumbing.....	.....	21 14	.....
Book cases.....	.....	80 00	.....
Painting.....	.....	79 00	.....
Repairing roof.....	.....	95 00	.....
Mason work.....	.....	24 32	.....
New sash.....	.....	116 94	.....
Clover Street.....	15 86	.....	30 75
Painting.....	.....	14 89	.....
South Eighth Street.....	139 21	.....	679 74
New fence.....	.....	259 63	.....
Repairing roof.....	.....	123 00	.....
Artificial stone work.....	.....	140 00	.....
New metre.....	.....	17 90	.....
Thirteenth Avenue.....	146 47	.....	348 27
Plumbing.....	.....	36 00	.....
Repairing roof.....	.....	36 30	.....
New fence.....	.....	129 50	.....
Central Avenue.....	168 36	.....	1,057 25
Artificial stone floor.....	.....	569 30	.....
Plumbing.....	.....	91 19	.....
New ceilings.....	.....	92 40	.....
Painting.....	.....	24 00	.....
Repairing roof.....	.....	112 00	.....
Lock Street.....	22 26	.....	22 26
Warren Street.....	143 58	.....	143 58

TABLE C—Continued.

SCHOOL BUILDINGS.	Ordinary Repairs.	Extra- ordinary Repairs.	Whole Amount Expended.
Wickliffe Street.....	\$51 36	.....	\$88 57
New floor.....	.....	\$37 21	.....
Summer Avenue.....	61 92	.....	180 05
Plumbing.....	.....	79 13	.....
Painting.....	..	39 00	.....
Elliot Street.....	41 58	..	41 58
Ridge Street.....	11 91	.....	70 11
Water connections.....	.....	58 20	.....
Miller Street.....	96 35	.....	903 48
New ceilings.....	.....	627 38	.....
Plumbing.....	..	67 65	.....
Painting roof.....	.....	72 10	.....
New floor.....	.....	40 00	.....
Elizabeth Avenue.....	71 09	.....	143 23
New windows.....	..	40 84	..
Painting walls.....	.....	31 30	.....
Charlton Street.....	52 05	.....	289 99
Storm doors.....	.....	145 29	.....
Partition in court.....	.....	92 65	.....
Oliver Street.....	160 99	.....	676 25
New water closets.....	.....	67 95	.....
New ceilings.....	.....	105 24	..
Artificial stone floor.....	.....	40 00	.....
Plumbing.....	.....	81 99	.....
Flagging.....	.....	82 08	..
Painting office.....	.....	40 00	.....
Painting roof.....	.....	98 00	.....
South Street.....	196 23	.....	504 75
Rebuilding and painting fence..	.....	150 95	.....
Plumbing.....	.....	109 82	..
Painting.....	..	47 75	.....
Walnut Street.....	42 97	.....	370 86
Painting.....	.....	18 00	.....
Artificial stone floor.....	.....	199 93	.....
Painting roof.....	.....	87 46	.....
Plumbing.....	.....	22 50	.....
Ann Street.....	153 71	.....	339 72
Tin roof on boiler room.....	.....	14 98	.....
Mason work.....	.....	89 00	.....
Plumbing.....	.....	28 28	.....
Painting.....	.....	53 75	.....
North Seventh Street.....	265 20	.....	1,528 07
New water closets.....	.....	94 20	.....
Grading.....	.....	287 00	.....

TABLE C—Continued.

SCHOOL BUILDINGS.	Ordinary Repairs.	Extra- ordinary Repairs.	Whole Amount Expended.
New fence.....	.....	\$81 78	.....
Flagging.....	.....	60 20	.....
Sewer.....	.....	679 69	.....
Book case.....	.....	60 00	.....
Roseville Avenue.....	73 99	.....	388 99
Repairing and painting roof....	.....	288 00	.....
Plumbing.....	.....	27 00	.....
South Market Street.....	157 78	.....	1,638 88
New water closets .....	.....	1,424 10	.....
Plumbing.....	.....	27 00	.....
Mason work.....	.....	30 00	.....
Hamburg Place.....	95 02	.....	681 86
Book case.....	.....	58 77	.....
Repairing and painting roof ...	.....	86 00	.....
New front doors.....	.....	40 07	.....
Artificial stone floor.....	.....	362 00	.....
Painting.....	.....	40 00	.....
Hawkins Street.....	59 41	.....	539 36
Repairing roof.....	.....	22 53	.....
Filling water closet vaults.....	.....	45 00	.....
Artificial stone floor.....	.....	87 00	.....
Plumbing.....	.....	234 90	.....
Repairing slate roof.....	.....	90 52	.....
South Tenth Street.....	128 05	.....	202 05
Painting.....	.....	74 00	.....
Camden Street.....	68 88	.....	232 93
Painting.....	.....	37 00	.....
Mason work.....	.....	93 75	.....
Repairing roof.....	.....	33 30	.....
Waverly Avenue.....	64 24	.....	238 23
Flagging.....	.....	42 54	.....
Mason work.....	.....	65 00	.....
Repairing and painting roof....	.....	66 45	.....
Fifteenth Avenue.....	62 98	.....	114 44
Partition in court.....	.....	31 12	.....
Plumbing.....	.....	20 34	.....
Newton Street.....	341 60	.....	1,198 51
Artificial stone floor.....	.....	545 45	.....
Painting.....	.....	94 00	.....
Repairing and painting roof....	.....	120 00	.....
Plumbing.....	.....	97 46	.....
Eighteenth Avenue.....	160 91	.....	450 32
New water closets.....	.....	41 75	.....
Repairing and painting roof....	.....	92 00	.....

TABLE C—Continued.

SCHOOL BUILDINGS.	Ordinary Repairs.	Extra- ordinary Repairs.	Whole Amount Expended.
Hall ceiling.....	.....	\$39 53	.....
Painting.....	.....	13 00	.....
Flagging.....	.....	103 13	.....
Livingston Street.....	\$22 42	.....	\$22 42
"Franklin".....	60 47	.....	157 11
Plumbing.....	.....	29 05	.....
New doors, etc.....	.....	67 59	.....
Evening High.....	10 78	.....	10 78
Central Avenue Evening.....	33 00	.....	33 00
Evening Drawing....	5 85	.....	5 85

**TABLE D.**  
**FURNITURE AND SUPPLIES.**

SCHOOL BUILDINGS.	Ordinary Supplies.	Furniture and Wall Slates.	Whole Amount Expended.
Normal and Training.....	\$78 54	.....	\$120 79
New furniture.....	.....	\$42 25	.....
High....	98 79	.....	112 83
Wall slates.....	.....	14 04	.....
High Annex (5 Washington st.)..	143 18	.....	590 18
New furniture.....	.....	447 00	.....
High Annex (103 Washington st.)	20 66	.....	20 66
Burnet Street.....	82 01	.....	98 51
Wall slates.....	.....	16 50	.....
State Street ..	97 34	.....	113 02
Wall slates.....	.....	15 68	.....
James Street.....	36 11	.....	36 11
Webster Street.....	67 91	.....	67 91
Washington Street.....	90 59	.....	90 59
Marshall Street.....	9 68	.....	9 68
Morton Street.....	115 76	.....	166 98
Wall slates.....	.....	20 97	.....
New furniture.....	.....	30 25	.....
Broome Street..	9 48	.....	9 48
Court Street ..	63 43	.....	63 43
Monmouth Street.....	119 22	.....	119 22
Lawrence Street.....	82 71	.....	256 11
New furniture.....	.....	173 40	.....
Commerce Street.....	97 31	.....	97 31
Colored.....	24 91	.....	34 56
Wall slates.....	.....	9 65	.....
Chestnut Street.....	84 33	.....	96 23
Wall slates.....	.....	11 90	.....
Lafayette Street.....	112 38	.....	112 38
Clover Street.....	28 60	.....	28 60
South Eighth Street.....	150 81	.....	150 81
Thirteenth Avenue.....	91 18	.....	209 98
New furniture.....	.....	118 80	.....
Central Avenue.....	56 40	.....	56 40
Lock Street.....	28 08	.....	28 08
Warren Street.....	88 63	.....	88 63
Wickliffe Street.....	85 71	.....	85 71
Wickliffe Street Annex.....	1 26	.....	1 26
Summer Avenue ..	27 46	.....	27 46
Elliot Street.....	30 08	.....	30 08
Ridge Street.....	45 63	.....	45 63
Miller Street.....	141 02	.....	168 58



TABLE D—Continued.

SCHOOL BUILDINGS.	Ordinary Supplies.	Furniture and Wall Slates.	Whole Amount Expended.
Wall slates. . . . .	.. ..	\$27 56	.....
Elizabeth Avenue. . . . .	\$362 17	.. ..	\$1,158 07
Wall slates. . . . .	.....	224 10	.....
New furniture. . . . .	.....	571 80	.....
Charlton Street. . . . .	596 11	.....	1,504 69
Wall slates. . . . .	.....	118 73	.....
New furniture. . . . .	.....	789 85	.....
Oliver Street. . . . .	142 59	.....	238 64
Wall slates. . . . .	.....	96 05	.....
South Street. . . . .	87 50	.....	87 50
Walnut Street. . . . .	54 84	.....	54 84
Ann Street. . . . .	26 29	.....	26 29
North Seventh Street. . . . .	162 35	.....	162 35
Roseville Avenue. . . . .	30 55	.....	30 55
South Market Street. . . . .	115 64	.....	151 39
Wall slates. . . . .	.....	35 75	.....
Hamburg Place. . . . .	84 73	.....	84 73
Hawkins Street. . . . .	31 65	.....	31 65
South Tenth Street. . . . .	96 45	.....	96 45
Holland Street. . . . .	10 50	.....	10 50
Camden Street. . . . .	51 59	.....	51 59
Waverly Avenue. . . . .	21 51	.....	21 51
Fifteenth Avenue. . . . .	449 83	.....	1,466 68
New furniture. . . . .	.....	894 85	.....
Wall slates. . . . .	.....	121 40	.....
Newton Street. . . . .	63 25	.....	170 00
New furniture. . . . .	.....	106 75	.....
Eighteenth Avenue. . . . .	81 43	.....	99 15
Wall slates. . . . .	.....	17 72	.....
Livingston Street. . . . .	5 65	.....	5 65
"Franklin". . . . .	314 35	.....	1,134 27
Wall slates. . . . .	.....	34 82	.....
New furniture. . . . .	.....	785 10	.....
Bloomfield Avenue. . . . .	50	.....	50
Evening High. . . . .	45	.....	45
Webster Street Evening. . . . .	45	.....	45
Morton Street Evening. . . . .	6 20	.....	6 20
Lafayette Street Evening. . . . .	45	.....	45
Central Avenue Evening. . . . .	30	.....	30
South Street Evening. . . . .	15	.....	15
South Market Street Evening. . . . .	45	.....	45
South Tenth Street Evening. . . . .	3 50	.....	3 50
Eighteenth Avenue Evening. . . . .	15	.....	15
Evening Drawing. . . . .	48 45	.....	48 45

TABLE E.  
HEATING APPARATUS AND FUEL.

SCHOOL BUILDINGS.	Heating Apparatus.			Fuel.		
	Ordinary Expenditures.	Extraordinary Expenditures.	Total.	Tons of Coal.	Cost.	Cost of Wood.
Normal and Training.....	\$52 95	.....	\$52 95	60	\$267 75	.....
High.....	41 28	.....	41 28	67	300 30	\$4 00
High Annex (5 Washington St.)..	13 35	\$97 06	110 41	10 $\frac{1}{2}$	49 25	1 85
High Annex (103 Washington St.)..	24 85	.....	24 85	15	66 00	7 70
Burnet Street.....	33 34	.....	33 34	56	246 50	3 70
State Street.....	44 44	.....	44 44	52	226 30	4 00
James Street Industrial.....	15 20	.....	15 20	23	100 30	3 70
Webster Street.....	42 81	.....	42 81	55	241 50	.....
Washington Street.....	47 60	93 00	140 60	85	373 75	4 00
Marshall Street.....	28 05	.....	28 05	33	142 35	3 70
Morton Street.....	98 25	.....	98 25	145	649 75	3 70
Broome Street.....	10 55	.....	10 55	11	48 40	.....
Court Street.....	44 62	.....	44 62	12	57 15	3 70
Monmouth Street.....	121 87	.....	121 87	94	422 60	3 70
Lawrence Street.....	81 49	.....	81 49	80	353 00	.....
Commerce Street.....	33 06	236 00	269 06	53	239 75	.....
Colored.....	3 35	.....	3 35	6	25 80	3 70
Chestnut Street.....	58 34	968 38	1026 72	80	350 50	.....
Lafayette Street.....	18 50	.....	18 50	58 $\frac{1}{2}$	252 40	3 70
Clover Street Industrial.....	5 35	.....	5 35	4	19 00	2 00
					\$267 75	\$267 75
					304 30	304 30
					51 10	51 10
					73 70	73 70
					250 20	250 20
					230 30	230 30
					104 00	104 00
					241 50	241 50
					377 75	377 75
					146 05	146 05
					653 45	653 45
					48 40	48 40
					60 85	60 85
					426 30	426 30
					353 00	353 00
					239 75	239 75
					29 50	29 50
					350 50	350 50
					256 10	256 10
					21 00	21 00

South Eighth Street.....	48 20	51 37	99 57	85	373 50	....	373 50
Thirteenth Avenue.....	23 30	43 30	66 60	108	481 81	3 70	485 51
Central Avenue.....	30 10	.....	30 10	86	378 15	3 70	381 85
Lock Street.....	29 35	.....	29 35	27	117 30	....	117 30
Warren Street.....	5 50	.....	5 50	85	371 00	....	371 00
Wickliffe Street.....	49 12	.....	49 12	22	98 81	3 85	102 66
Wickliffe Street Annex	.....	.....	.....	5	22 00	....	22 00
Summer Avenue.....	56 96	33 29	90 25	122	535 30	7 70	543 00
Elliot Street.....	30 05	.....	30 05	56	240 65	....	240 65
Ridge Street.....	14 90	.....	14 90	10	41 50	....	41 50
Miller Street.....	18 15	65 24	83 39	95	417 75	....	417 75
Elizabeth Avenue.....	12 30	874 35	886 65	39	169 60	3 70	173 30
Charlton Street.....	26 75	2926 70	2953 45	54	237 30	3 70	241 00
Oliver Street.....	14 95	.....	14 95	78	332 20	....	332 20
South Street.....	30 14	.....	30 14	55	242 00	....	242 00
Walnut Street.....	17 07	.....	17 07	35	145 25	....	145 25
Ann Street.....	14 55	51 37	65 92	100	439 50	3 70	443 20
North Seventh Street.....	32 90	1122 50	1155 40	134	569 55	9 70	579 25
Roseville Avenue.....	11 75	.....	11 75	35	158 50	4 00	162 50
South Market Street.....	13 10	.....	13 10	60	268 00	4 00	272 00
Hamburg Place.....	31 46	220 54	252 00	80	354 50	3 70	358 20
Hawkins Street.....	12 85	.....	12 85	55	241 50	....	241 50
South Tenth Street.....	31 80	36 75	68 55	65	286 00	....	286 00
Holland Street.....	50	.....	50	4	18 30	2 00	20 30
Camden Street.....	23 35	88 67	112 02	50 $\frac{1}{2}$	220 68	3 70	224 38
Waverly Avenue.....	43 11	112 85	155 96	100 $\frac{3}{4}$	447 95	4 00	451 95
Fifteenth Avenue.....	18 10	2439 40	2457 50	87	430 80	4 00	434 80
Newton Street.....	66 28	55 70	121 98	112	496 80	3 70	500 50
Eighteenth Avenue.....	71 51	.....	71 51	110 $\frac{1}{2}$	555 98	3 70	559 68
Livingston Street.....	6 60	.....	6 60	14 $\frac{3}{4}$	66 32	....	66 32
"Franklin".....	29 75	2701 14	2730 89	100	442 00	....	442 00
Bloomfield Avenue.....	.....	.....	.....	2	8 70	....	8 70
Evening Drawing.....	2 60	.....	2 60	10	34 70	..	34 70

TABLE F

Showing Average Enrollment, Salaries, Cost of School Books, other Ordinary Expenses, Total Ordinary Expenses, Extraordinary Expenses, Total Current Expenses, Cost of Books per Pupil, and Annual Cost per Pupil.

SCHOOLS.	Average Enrollment.	Salaries of Teachers.	School Books, Stationery and Printing.	Ordinary Expenses, Repairs, Fuel, Heating, Janitors, Rent, etc.	Total Ordinary Expenses.	Extraordinary Expenses for Furniture and Wall States; Heating and Repairs.	Total Current Expenses.	Cost of Books per Pupil.	Annual Cost per Pupil.
Normal and Training—									
Normal Department.....	76	\$4,295 13	\$179 16	\$302 24	\$4,776 53	\$29 13	\$4,805 66	\$2 36	\$29 85
Training Department.....	307	6,373 37	246 19	906 76	7,526 32	87 40	7,613 72	80	24 52
High.....	817	33,405 81	1,928 85	1,759 16	37,093 82	74 76	37,168 58	2 36	45 40
High Annex (5 Washington st.)....	201	2,828 16	66 28	940 48	3,834 92	60 126	4,439 18	33	19 08
High Annex (103 " ).....	170	5,548 08	81 34	1,388 28	7,017 70	118 41	7,136 11	48	41 28
Burnet Street Grammar.....	301	7,041 25	533 19	820 53	8,394 97	416 71	8,811 68	1 77	27 89
Burnet Street Primary.....	404	6,082 25	102 65	820 53	7,005 42	416 72	7,422 14	40	17 49
State Street Primary.....	463	7,231 31	192 70	1,168 56	8,592 59	240 30	8,838 89	42	18 56
James Street Industrial.....	168	2,593 22	35 76	658 83	3,287 81	.....	3,287 81	21	19 57
Webster Street Grammar.....	205	2,332 15	131 69	387 44	2,851 28	101 75	2,953 03	64	13 91
Webster Street Primary.....	324	5,010 20	111 75	1,110 53	7,132 48	142 47	7,274 95	35	22 01
Washington Street Grammar.....	340	7,536 18	720 54	1,106 32	9,363 24	155 36	9,518 60	2 12	27 54
Washington Street Primary.....	244	3,753 70	102 66	698 48	4,554 24	160 01	4,714 25	42	18 60
Marshall Street Primary.....	225	3,626 35	93 17	797 69	4,517 21	18 00	4,535 21	41	20 08
Morton Street Grammar.....	305	5,675 27	507 53	742 18	6,924 98	122 79	7,047 77	1 66	22 70
Morton Street Primary.....	732	10,243 86	498 98	1,484 39	12,137 14	245 60	12,382 74	56	16 58
Broome Street Primary.....	153	2,082 09	30 00	709 76	2,911 85	24 30	2,936 15	20	19 03
Court Street Primary.....	89	891 47	38 28	508 90	1,458 65	16 00	1,474 65	65	16 39
Monmouth Street Primary.....	894	12,061 40	455 85	1,765 16	14,282 41	83 20	14,365 61	51	15 98
Lawrence Street Grammar.....	453	5,809 08	400 10	985 63	7,194 81	183 12	7,377 93	1 58	28 44
Lawrence Street Primary.....	201	3,229 71	73 84	779 77	4,083 32	156 04	4,240 26	39	21 38
Commerce Street Primary.....	237	3,661 20	71 30	956 27	4,688 77	401 25	5,090 02	30	19 78
Colored.....	163	3,474 02	173 29	453 93	4,101 24	89 25	4,190 49	1 06	25 16
Chestnut Street Grammar.....	313	6,056 05	673 11	895 76	8,224 92	549 40	8,774 32	2 15	26 28
Chestnut Street Primary.....	416	6,490 54	329 71	895 76	7,716 01	549 41	8,265 42	79	18 55

Lafayette Street Grammar.....	226	4,951 04	434 06	610 04	5,996 04	145 56	6,141 60	1 92	26 53
Lafayette Street Primary.....	498	7,741 36	159 64	1,162 24	9,003 24	270 84	9,334 08	30	18 20
Clover Street Industrial.....	99	1,409 84	30 03	512 61	1,952 48	11 89	1,967 37	32	19 72
South Eighth St. Grammar.....	350	7,297 84	331 93	977 19	8,606 93	339 93	8,946 89	95	24 59
South Eighth St. Primary.....	368	5,288 27	102 91	724 45	6,115 63	251 97	6,367 60	28	16 02
Thirteenth Ave. Grammar.....	256	1,762 64	599 62	222 20	2,384 46	04 27	2,678 73	2 34	10 10
Thirteenth Ave. Primary.....	953	10,800 67	643 67	1,605 79	13,050 13	260 93	13,319 76	85	13 69
Central Avenue Grammar.....	236	5,687 80	199 99	713 08	6,000 87	380 92	6,381 79	68	25 43
Central Avenue Primary.....	408	5,919 50	156 25	951 19	7,026 94	507 97	7,534 91	38	17 22
Lock Street Primary.....	213	3,093 25	52 77	694 52	3,840 54	.....	3,840 54	25	18 03
Warren Street Primary.....	386	5,485 33	73 77	1,368 92	7,118 02	.....	7,118 02	68	18 44
Wickliffe Street Primary.....	143	3,100 13	74 76	901 45	4,076 34	37 21	4,113 55	54	10 26
Wickliffe St. Annex Primary.....	159	1,235 33	6 47	389 93	1,631 73	.....	1,631 73	04	21 86
Summer Avenue Grammar.....	305	6,654 75	464 85	855 98	7,980 54	75 71	8,056 25	1 29	17 26
Summer Avenue Primary.....	372	5,438 91	124 25	855 98	6,419 14	75 71	6,494 85	33	17 04
Elliot Street Primary.....	444	6,849 02	502 94	1,010 17	8,452 13	.....	8,452 13	1 27	28 49
Ridge Street Primary.....	103	1,599 87	120 40	1,304 58	2,934 91	58 20	2,993 11	1 53	20 98
Miller Street Grammar.....	400	6,917 26	612 65	863 69	8,393 60	476 71	8,870 31	50	16 62
Miller Street Primary.....	493	5,680 22	293 01	816 32	2,979 98	423 22	7,122 77	1 29	31 70
Elizabeth Avenue Primary.....	94	1,848 54	120 81	1,010 63	1,742 39	1,473 22	7,927 41	1 18	8 24
Charlton Street Primary.....	468	1,910 49	552 02	1,391 68	3,854 19	4,073 22	9,119 22	2 02	27 93
Oliver Street Grammar.....	314	7,182 23	634 82	952 04	8,760 99	319 23	9,114 97	35	17 47
Oliver Street Primary.....	312	4,627 33	109 81	714 85	5,451 99	262 08	5,716 83	38	18 76
South Street Primary.....	494	7,595 80	189 81	1,512 67	9,268 31	308 52	9,576 83	41	19 34
Walnut Street Primary.....	348	5,584 60	142 42	1,004 58	6,731 60	327 89	7,059 49	40	18 51
Ann Street Primary.....	450	6,654 55	178 37	1,496 89	8,359 81	237 38	8,597 19	2 78	26 27
North Seventh St. Grammar.....	188	3,711 83	521 76	705 14	4,938 73	840 58	5,779 31	72	17 88
North Seventh St. Primary.....	432	6,166 56	310 38	1,308 37	7,725 31	1,544 79	9,270 10	32	18 66
North Seventh Avenue Primary.....	314	4,833 64	100 54	926 24	5,800 42	315 00	6,175 42	1 79	22 00
Roseville Avenue Primary.....	247	4,556 27	442 97	631 52	5,630 76	631 94	6,262 70	45	19 03
South Market St. Grammar.....	352	5,655 36	158 34	884 45	6,668 15	884 91	7,553 06	79	22 83
South Market Street Primary.....	279	5,199 56	502 40	677 41	6,370 43	345 64	6,716 07	1 80	15 83
Hamburg Place Grammar.....	483	6,448 41	293 41	993 67	7,645 47	461 74	8,107 23	61	18 62
Hawkins Street Primary.....	395	5,452 09	181 77	1,160 67	6,795 13	479 95	7,275 08	50	15 96
South Tenth Street Primary.....	824	11,243 63	404 94	1,505 68	13,154 25	110 75	13,265 00	49	10 71
Holland Street Primary.....	90	722 81	8 36	232 30	963 47	.....	963 47	69	17 00
Camden Street Primary.....	707	10,770 93	475 55	1,195 55	12,441 13	252 72	12,693 85	67	16 00
Waverly Avenue Primary.....	474	5,946 30	282 60	1,352 89	7,583 79	286 84	7,870 63	60	16 00



TABLE F—Continued.

SCHOOLS.	Average Enrollment.	Salaries of Teachers.	School Books, Stationery and Printing.	Ordinary Expenses, Heating, Fuel, Repairs, etc.	Total Ordinary Expenses.	Extraordinary Expenses for Furniture and Wall Slates; Repairs.	Total Current Expenses.	Cost of Books	Per Pupil.	Annual Cost Per Pupil.
Fifteenth Avenue Primary.....	467	\$2,177 32	\$463 14	\$1,598 90	\$4,239 36	\$3,507 11	\$7,746 47	1 06	80	\$ 9 08
Newton Street Grammar.....	439	7,906 56	702 90	1,100 36	9,769 88	594 42	10,364 30	1 00	22 26	17 27
Newton Street Primary.....	449	6,661 83	342 38	849 31	7,754 52	424 04	8,179 40	1 54	20 87	15 49
Eighteenth Avenue Grammar.....	362	6,300 33	454 07	799 13	7,553 53	129 31	7,682 84	1 25	20 87	15 49
Livingston Street Primary.....	619	8,221 32	270 38	1,008 94	9,500 04	177 82	9,678 46	1 44	13 91	13 91
" Franklin " Grammar.....	250	2,449 10	24 41	1,003 99	3,477 50	.....	3,477 50	1 24	17 27	13 91
" Franklin " Primary.....	401	2,257 77	497 56	519 09	3,274 42	2,144 06	5,418 48	1 24	17 27	13 91
Bloomfield Avenue Primary.....	472	6,405 01	210 39	1,195 22	7,816 62	1,473 64	9,290 26	1 46	16 56	16 56
Evening High.....	89	786 03	12 27	475 87	1,274 17	.....	1,274 17	1 14	14 32	16 13
Webster Street Evening.....	186	2,527 50	206 25	224 25	3,048 00	.....	3,048 00	1 57	16 13	16 13
Morton Street Evening.....	302	2,229 50	142 21	362 64	2,734 35	.....	2,734 35	1 03	9 03	9 03
Lafayette Street Evening.....	380	3,135 22	268 26	464 00	3,868 08	.....	3,868 08	1 03	9 03	9 03
Central Avenue Evening.....	209	1,818 75	104 18	379 99	2,302 92	.....	2,302 92	1 03	9 03	9 03
South Street Evening.....	184	1,824 25	52 70	266 16	2,143 11	.....	2,143 11	1 03	9 03	9 03
South Market Street Evening.....	146	616 00	54 62	75 40	746 02	.....	746 02	1 03	9 03	9 03
South Tenth Street Evening.....	210	1,831 00	81 39	324 00	2,236 39	.....	2,236 39	1 03	9 03	9 03
Newton Street Evening.....	188	1,682 00	51 24	181 49	1,914 73	.....	1,914 73	1 03	9 03	9 03
Eighteenth Avenue Evening.....	199	1,608 25	61 87	303 19	2,063 31	.....	2,063 31	1 03	9 03	9 03
Evening Drawing.....	179	1,766 25	64 25	213 41	2,043 91	.....	2,043 91	1 03	9 03	9 03
James Street Summer.....	430	3,264 50	78 80	1,890 00	5,233 30	.....	5,233 30	1 18	12 17	12 17
Webster Street Summer.....	114	113 25	19 34	6 00	138 59	.....	138 59	1 17	12 17	12 17
Morton Street Summer.....	172	161 75	15 14	9 00	185 89	.....	185 89	1 09	1 08	1 08
Wickliffe Street Summer.....	741	697 75	74 28	42 00	814 03	.....	814 03	1 10	1 10	1 10
Hamburg Place Summer.....	248	268 25	25 81	12 00	246 06	.....	246 06	1 10	1 10	1 10
South Tenth Street Summer.....	397	383 75	4 18	21 00	408 93	.....	408 93	1 01	1 03	1 03
Newton Street Summer.....	379	382 25	16 57	27 00	419 82	.....	419 82	1 04	1 11	1 11
Eighteenth Avenue Summer.....	524	473 00	12 10	21 00	512 10	.....	512 10	1 02	1 02	1 02
.....	513	504 75	86 91	29 00	620 66	.....	620 66	1 17	1 21	1 21

Annual cost per pupil in Normal and Training School, Normal Department, \$60.85; in High School, \$40.36; in Grammar Schools, \$22.20; in Primary Schools, \$17.12; in Industrial Schools, \$19.63; in the Colored School, \$25.16; in the Day Schools, \$19.62; in the Evening Schools, \$10.83; in the Summer Schools, \$1.08.



TABLE G.

NAME AND GRADE OF SCHOOL.	No. of male teachers.		No. of female teachers.		No. of male pupils.		No. of female pupils.		Whole number of pupils.		Average number of regis- tered pupils.		Average daily attendance for year.		No. of months school has been kept open during year.		No. of children bet. 5 and 18 years of age en- rolled during year.		No. who have attended 10 months or more during year.		No. who have attended 8 months, but less than 10.		No. who have attended 6 months, but less than 8.		No. who have attended 4 months, but less than 6.		No. who have attended less than 4 months.		No. who have been pres- ent every school day during year.		No. who have not been absent or tardy during year.		No. of cases of tardiness during year.		No. of different classes in school.		No. suspended or ex- pelled during year.		No. of visits by City Superintendent.		No. of visits by Commis- sioners.		No. of visits by Drawing Teacher.		No. of visits by Music Teacher.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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TABLE G—Continued.

NAME AND GRADE OF SCHOOL.	PRIMARY SCHOOLS.		No. of female pupils.	No. of male pupils.	Whole No. of pupils.	Average number of reg- istered pupils.	Average daily attend- ance for year.	No. of months school has been kept open	No. of children bet. 5 and 18 years of age enrolled during year.	No. who have attended 10 months or more during year.	No. who have attended 8 months, but less than 10.	No. who have attended 6 months, but less than 8.	No. who have attended 4 months, but less than 6.	No. less than 4 months.	No. who have been present every school day during year.	No. who have not been absent or tardy dur- ing year.	No. of cases of tardi- ness during year.	No. of different classes in school.	No. suspended or ex- pelled during year.	No. of visits by City Superintendent.	No. of visits by Com- missioners.	No. of visits by Draw- ing Teacher.	No. of visits by Music Teacher.
	No. of female teachers.	No. of male teachers.																					
Normal and Training Department.....	6	217	210	427	307	268	10	427	9	186	59	123	39	6	2	3	39	14	45	14	14	85	47
Burnet Street.....	8	259	247	506	404	367	10	506	8	295	63	106	37	8	8	8	37	15	28	28	15	95	8
State Street.....	11	332	316	648	463	409	10	648	109	211	110	103	83	10	12	1	227	7	8	8	25	3	4
Webster Street.....	5	102	194	430	334	274	10	430	9	190	67	42	124	8	6	8	93	5	25	9	10	7	7
Washington Street.....	5	162	161	323	244	214	10	323	9	145	53	38	78	9	6	8	85	5	4	25	30	13	8
Marshall Street.....	5	152	164	316	245	191	10	316	6	117	50	42	101	8	6	6	85	5	3	6	30	13	8
Morton Street.....	14	496	437	933	732	617	10	933	8	466	157	81	221	9	8	8	81	14	23	45	45	1	7
Broome Street.....	3	96	99	195	153	131	10	195	3	100	37	9	46	3	3	4	41	10	8	18	1	2	1
Court Street.....	2	71	51	122	89	73	7	122	1	59	12	59	51	18	16	16	77	2	8	8	18	1	1
Monmouth Street.....	1	603	586	1,189	942	792	10	1,189	18	587	157	118	359	18	18	16	189	16	6	8	18	1	1
Lawrence Street.....	4	140	127	267	191	162	10	267	4	114	37	25	87	4	4	4	96	4	36	4	23	5	4
Commerce Street.....	6	188	165	353	237	205	10	353	3	87	65	72	129	24	2	2	378	6	1	33	12	3	2
Chestnut Street.....	8	273	286	559	416	369	10	559	30	265	105	55	124	3	3	3	24	8	20	7	3	4	4
Lafayette Street.....	10	346	311	657	468	407	10	657	30	262	143	57	162	7	4	4	164	10	12	32	5	2	2
South Eighth Street.....	7	264	219	483	368	318	10	483	9	216	81	56	121	9	8	8	190	7	7	13	14	5	7
Thirteenth Avenue.....	17	561	609	1,170	933	833	10	1,170	11	664	184	111	200	11	11	11	39	17	17	18	5	4	7
Central Avenue.....	8	259	282	541	408	358	10	541	5	290	70	37	139	5	5	4	305	8	2	12	15	5	7
Lock Street.....	4	175	123	298	213	182	10	298	1	101	50	44	90	1	1	1	250	4	10	24	0	5	1
Warren Street.....	9	269	265	534	386	332	10	534	13	239	74	73	135	13	4	4	179	8	10	24	45	4	3
Wickliffe Street.....	4	121	109	230	143	117	10	230	2	53	35	34	106	2	2	2	174	4	20	30	2	2	2
Wickliffe Street Annex.....	3	119	89	208	159	134	10	208	2	94	40	22	52	2	2	2	174	4	20	30	2	2	2
Summer Avenue.....	10	252	232	484	372	336	10	484	2	224	107	50	101	2	2	2	375	9	16	15	4	5	7
Elliot Street.....	10	280	290	570	444	383	10	570	76	209	102	52	131	5	4	4	375	9	16	15	4	5	7
Ridge Street.....	2	65	57	122	103	88	10	122	13	63	17	10	19	1	1	1	108	2	26	10	2	3	3
Miller Street.....	8	284	227	511	403	352	10	511	4	267	86	44	110	4	4	4	162	8	26	10	2	3	3
Elizabeth Avenue.....	2	72	58	130	94	77	10	130	2	49	25	18	38	2	2	2	64	2	12	9	3	1	1
Oliver Street.....	6	181	218	399	312	275	10	399	2	207	54	46	90	2	2	2	25	6	16	16	4	4	5
South Street.....	1	318	317	635	404	436	10	635	9	268	106	85	137	9	9	9	252	10	2	17	3	3	3
Walnut Street.....	9	250	201	451	348	366	10	451	1	226	74	50	100	1	1	1	92	8	2	19	15	3	3
Ann Street.....	1	25	279	554	436	390	10	554	83	231	100	60	90	4	4	4	112	8	2	18	8	2	2
North Seventh Street.....	8	265	284	569	432	375	10	569	9	234	125	45	155	9	8	8	196	6	3	5	21	3	3
Roseville Avenue.....	7	195	212	407	314	277	10	407	10	189	72	45	93	8	8	8	125	7	3	5	21	3	3
South Market Street.....	7	246	233	479	332	303	10	479	10	290	79	35	74	8	7	7	163	7	17	4	4	4	4
Hawkins Place.....	8	313	279	592	483	432	10	592	106	230	97	48	111	7	7	7	89	7	12	5	2	2	2
Hawkins Street.....	1	260	222	482	365	313	10	482	5	247	61	53	116	5	5	5	109	7	12	5	2	2	2
South Tenth Street.....	1	521	520	1,041	854	752	10	1,041	17	628	103	81	212	17	16	16	109	16	2	10	4	4	4
Holland Street.....	1	65	56	121	90	81	10	121	1	65	13	8	35	1	1	1	36	2	3	6	1	1	1
Camden Street.....	2	65	44	889	707	634	10	889	14	500	119	88	168	10	10	10	13	14	1	4	6	1	1
Waverly Avenue.....	1	288	302	590	474	420	10	590	10	316	95	57	112	9	8	8	114	8	4	8	25	3	4
Newton Street.....	8	270	294	564	449	410	10	564	12	304	104	40	104	10	10	10	34	8	21	10	10	5	7

TABLE G—Continued.

NAME AND GRADE OF SCHOOL.		No. of male teachers.	No. of female teachers.	No. of male pupils.	No. of female pupils.	Whole No. of pupils.	Average number of reg- istered pupils.	Average daily attend- ance for year.	No. of months school has been kept open during year.	No. of children bet. 5 and 18 years of age enrolled during year.	No who have attended 10 months or more during year.	No. who have attended 8 months, but less than 10.	No. who have attended 6 months, but less than 8.	No who have attended 4 months, but less than 6.	No. who have attended less than 4 months.	No. who have been present every school day during year.	No. who have not been absent or tardy dur- ing year.	No. of cases of tardiness during year.	No. of different classes in school.	No suspended or ex- pelled during year.	No. of visits by City Superintendent.	No. of visits by Com- missioners.	No. of visits by Draw- ing Teacher.	No. of visits by Music Teacher.
Eighteenth Avenue.....		11	494	400	804	619	545	10	804	4	397	135	88	180	4	4	50	11	6	11	8	5	3	3
Livingston Street.....		4	202	146	348	280	218	10	348	4	154	52	31	108	4	4	31	4	7	2	3	4	2	3
"Franklin".....		9	304	289	593	472	420	10	593	.....	360	104	55	120	9	8	19	8	.....	.....	.....	.....	.....	.....
Bloomfield Avenue.....		2	59	52	111	80	79	10	111	.....	57	22	11	21	.....	.....	72	2	.....	4	.....	3	1	1
Total in Primary Schools.		7	332	11,172	10,663	16,747	14,681	10	21,835	650	10,376	3,497	2,262	5,050	241	214	5,017	325	128	621	570	218	204	204
James Street Industrial.....		4	132	128	260	168	136	10	260	14	69	52	30	95	.....	.....	435	4	6	5	3	3	2	2
"Clover Street Industrial.....		2	160	77	177	99	91	10	177	5	37	29	21	85	.....	.....	.....	2	.....	7	7	2	2	2
Total in Primary Grades.		7	338	11,404	10,868	22,272	17,014	10	22,272	669	10,482	3,578	2,313	5,230	241	214	5,452	331	134	633	580	223	208	208
Colored School.....		1	3	100	104	163	136	10	204	80	31	30	22	41	4	4	488	4	1	9	16	30	4	4
Total in Day Schools.....		37	482	14,861	14,906	29,767	23,363	20,727	10	29,637	1,329	14,857	4,371	2,843	6,367	631	574	7,667	485	182	1086	867	419	481
EVENING SCHOOLS.		8	.....	297	91	298	189	141	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	.....	6	7	.....	.....
Evening High.....		4	6	363	106	469	302	206	5	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	3	6	.....	.....	.....
Webster Street.....		4	8	395	198	593	380	280	5	.....	.....	.....	.....	.....	.....	.....	.....	11	.....	34	4	8	.....	.....
Morton Street.....		2	6	267	66	333	209	142	5	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	8	2	12	.....	.....
Lafayette Street.....		2	6	242	85	327	184	141	5	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	7	2	6	.....	.....
Central Avenue.....		4	4	200	56	256	210	153	5	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	7	5	4	.....	.....
South Market Street.....		5	3	215	125	340	188	149	5	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	3	4	5	.....	.....
South Tenth Street.....		5	2	194	69	263	109	164	5	.....	.....	.....	.....	.....	.....	.....	.....	7	.....	4	9	.....	.....	.....
Newton Street.....		4	4	210	64	274	170	136	5	.....	.....	.....	.....	.....	.....	.....	.....	15	.....	4	10	.....	.....	.....
Eighteenth Avenue.....		8	.....	520	65	585	430	370	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	6	.....	.....
Evening Drawing.....		46	39	2,813	925	3,738	2,470	1,882	5	.....	.....	.....	.....	.....	.....	.....	.....	96	45	39	73	.....	.....	.....
Total in Evening Schools.		46	39	2,813	925	3,738	2,470	1,882	5	.....	.....	.....	.....	.....	.....	.....	.....	96	45	39	73	.....	.....	.....
* In Normal and Training School, Normal Department, over 18, 73. † In High, 52; in High Annex, 5; total over 18, 57. ‡ In Day Schools, over 18, 130.																								

\* In Normal and Training School, Normal Department, over 18, 73. † In High, 52; in High Annex, 5; total over 18, 57. ‡ In Day Schools, over 18, 130.



## RULES.





# RULES

OF THE

## BOARD OF EDUCATION.

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### ORGANIZATION.

1. The Board of Education shall meet on the Tuesday next succeeding the first Monday after the first day of May in each year, for the purpose of organization, at which time a President, Secretary, Assistant Secretary, City Superintendent and Superintendent of Erection and Repairs of School Houses shall be elected for the ensuing year; but should no election of officers take place at that meeting, said election shall be in order at any meeting convened thereafter.

### MEETINGS.

2. Regular monthly meetings of the Board shall be held on the last Friday of each month. The hour of the meeting shall be eight o'clock p. m. during the year. At the hour appointed the roll shall be called and the names of the members then present recorded by the Secretary. The names of other members shall be recorded as they may afterwards appear. As soon as a quorum shall be present the Board shall proceed to business, and, after the organization, no member shall retire without the permission of the Chair.

3. A quorum shall consist of a majority of the Commissioners of the Board, and no resolution or order shall be adopted unless with the consent of a like number; but a less number may adjourn from time to time.

4. Special meetings may be called by the President when he shall deem it expedient, and shall be called whenever requested in writing by five members.

#### DUTIES OF PRESIDENT.

5. The President, or in his absence, a President *pro tem*, shall preside at the meetings of the Board, shall preserve order and decorum, may speak to points of order, and decide all questions of order, subject to an appeal to the Board on motion of any member, regularly seconded; and no other business shall be in order until the appeal shall have been decided. He may express his opinion on any subject under debate, but in such case he shall leave the chair and not resume it while the question is pending; but he may state facts, give his opinion on questions of order, or explain his vote without leaving his seat. He shall appoint all committees and be, *ex-officio*, a member of the same. He shall also be the executive officer of the Board, and, as such, effect insurance, sign contracts and leases, and perform such other duties as the Board may prescribe.

#### DUTIES OF SECRETARY.

6. The Secretary shall give notice of all meetings of the Board, attend them and keep full minutes of the proceedings; notify the chairman of every special committee, stating the duties assigned and the names of his associates; keep a full account of all moneys received and ex-

pended, and a separate and detailed account with each school, and draw warrants for all payments ordered by the Board; prepare, monthly, a schedule of the names of the officers, teachers and janitors in the schools, and the amount of salary due to each; also, quarterly, of the names of the persons to whom rent is due and the amount due to each, and transmit the same to the City Auditor of Accounts. He shall, under the direction and rules of the Board, and of the several committees, order all supplies for the schools, and keep a duplicate of his orders, and have charge of the supplies in stock; he shall also have the custody of the records, books and papers of the Board. He shall keep his office open daily from 8 a. m. until 5 p. m., (excepting Saturdays, when the offices of the Board shall be closed at 12 m.), and perform such other duties as may be required by law or by the Board, and his compensation shall be as the Board may prescribe.

#### DUTIES OF ASSISTANT SECRETARY.

7. The Assistant Secretary shall assist the Secretary in the discharge of his duties. In the absence of the Secretary he shall perform the duties of that office and render such other services as the Board may require. His compensation shall be as the Board may prescribe.

#### DUTIES OF CITY SUPERINTENDENT.

8. The City Superintendent shall have supervision of the schools, and visit them regularly and as frequently as possible. He shall, with the Committee on Text Books, Course of Study and Examinations, have the general direction and control of all examinations, and see that the regulations of the Board in relation to the schools are

carried into effect. He shall receive the reports of the principals ; keep full and accurate statistics of the schools in a suitable book or books ; report to the Board, monthly, the condition of the schools, with his suggestions thereon, and make the annual report to the Board required by law. He shall devote his whole time to the discharge of his official duties, and his compensation shall be such as the Board may prescribe.

#### DUTIES OF SUPERINTENDENT OF ERECTION AND REPAIRS.

9. The Superintendent of Erection and Repairs shall supervise the erection, heating, ventilation and repairs of school houses under the direction of the committees having charge of the same. He shall perform such other duties as the Board or the committees named may require. He shall also attend the meetings of the committees under whose direction he discharges the duties of his office, including the Committee on Finance, to explain bills coming under his supervision ; report daily at the office of the Board, and remain there when not elsewhere employed. His compensation shall be as the Board may prescribe.

#### STANDING COMMITTEES.

10. The Standing Committees for the year shall be as follows :

1. Committee on Finance, seven members.
2. Committee on School Houses, seven members.
3. Committee on Repairs, seven members.
4. Committee on Heating and Ventilating, seven members.
5. Committee on Teachers, seven members.

6. Committee on Normal and Training and High Schools, seven members.
7. Committee on Evening Schools, seven members.
8. Committee on Text Books, Course of Study and Examinations, seven members.
9. Committee on Furniture and Supplies, seven members.
10. Committee on Sanitary Regulations, seven members.

11. THE COMMITTEE ON FINANCE shall present to the Board, annually, at the time prescribed by law, an estimate of the amount of money required for the support of the public schools during the year, specifying, as provided in Title V, of the Charter of the City of Newark, the several sums for each branch of expenditure, and apportion the actual amounts appropriated for the use of this Board as soon as possible after such appropriation; supervise and examine the accounts of receipts and disbursements in the Secretary's office, and report to the Board at each regular meeting the amounts received and expended under each branch of the expenditure from the commencement of the fiscal year. Also, in case of necessity, after consultation with the committees interested, they shall readjust and reapportion the allotments to the several branches of expenditure, and report the same to the Board; and report from time to time on the character and propriety of all additional or extraordinary expenditures, and have general charge and supervision of all the financial affairs of the Board. They shall also receive and examine all bills and accounts referred to them by the Board, and if satisfied of their correctness, shall so certify thereon, and return the same to the Board at their next regular meeting after such reference, unless required

by the Board to report thereon sooner, and shall audit and approve, before payment, the pay and rent rolls. They shall also examine into all controverted claims and report thereon to the Board.

12. THE COMMITTEE ON SCHOOL HOUSES shall have supervision of school sites and buildings; recommend appropriate sites for school houses; prepare and submit to the Board plans and specifications for the erection of such houses, extensions or additions as shall be ordered by the Board, and cause all contracts for the performance of the work to be duly executed, heating and ventilating methods excepted.

13. THE COMMITTEE ON REPAIRS shall have supervision and charge of all ordinary repairs; shall visit and examine the school houses and report to the Board at the regular meeting in June the condition and wants of each for the ensuing year, with estimates of the expenditures necessary to meet the same. They shall submit plans and specifications for any extraordinary repairs, and, under the direction of the Board, cause all contracts therefor to be properly executed.

14. THE COMMITTEE ON HEATING AND VENTILATING shall, under the direction of the Board, by contract or otherwise, provide all heating and ventilating apparatus and appliances for the schools, and cause the same to be cleaned, repaired and refitted, and shall supply the necessary fuel. They shall submit to the Board, for their approval or rejection, methods of heating and ventilating new school houses. They shall, on recommendation of Commissioners, appoint janitors, prescribe their duties



and publish directions for their government, and for cause may discharge them, of which discharge they shall give notice to the proper Commissioners.

15. THE COMMITTEE ON TEACHERS shall, with the City Superintendent, examine all applicants for positions as teachers in the Primary and Grammar Schools, and recommend to the Board such as they deem qualified. With the City Superintendent, they may employ and determine the grade of teachers temporarily, but temporary appointments shall be submitted to the Board for approval or rejection at its next meeting. They shall determine the salaries for all the grades of teachers, and report the same to the Board for its approval. They shall investigate all complaints made against teachers, and report thereon to the Board whenever required; and with the sanction of the President, may, in emergency, suspend a teacher until the case shall have been acted upon by the Board. In cases of suspension, a written statement of facts upon which suspension is based shall be filed in the office of the City Superintendent for the information of the Commissioners. They shall perform such other duties as may be prescribed by the regulations or directed by the Board.

16. THE COMMITTEE ON NORMAL AND TRAINING AND HIGH SCHOOLS shall have the supervision of such schools. They shall, with the City Superintendent, examine all applicants for positions as teachers in such schools, and recommend to the Board such as they deem qualified. They shall also, from time to time, recommend such regulations for their management as they may deem advisable, and by personal inspection and examination

acquaint themselves with their conditions and report thereon to the Board. They shall also have charge of the Teachers' Institute.

17. THE COMMITTEE ON EVENING SCHOOLS shall have the supervision of such schools. They shall, with the City Superintendent, examine all applicants for positions as teachers in such schools, and recommend to the Board such as they deem qualified. They shall also, from time to time, recommend such regulations for their management as they may deem advisable, and by personal inspection and examination acquaint themselves with their condition and report thereon to the Board.

18. THE COMMITTEE ON TEXT BOOKS, COURSE OF STUDY AND EXAMINATIONS shall, from time to time, recommend to the Board such school books, maps, globes, charts and illustrative apparatus as they may think best adapted to the wants of the schools, but no vote shall be taken upon such recommendation until one month has elapsed, and no text book intended to supersede one in use shall be introduced except at the commencement of a term. They shall contract for such supplies, for books, maps and stationery, superintend the printing of all reports, documents, blank forms, etc., that may be especially ordered by the Board, or required in the transactions of the current business of the schools, and provide for their regular delivery by the contractor to the Secretary of the Board; and they shall have charge of the course of study in all the schools, and from time to time recommend such alterations and revisions thereof as they may deem proper. They shall also direct and, with the Superintendent, prescribe the times and rules for all examinations which may be ordered by the Board.

19. THE COMMITTEE ON SCHOOL FURNITURE AND SUPPLIES shall, under the direction of the Board, provide the school furniture and all miscellaneous articles not specified in the rules defining the duties of other committees.

20. THE COMMITTEE ON SANITARY REGULATIONS shall have supervision of the sanitary condition of the schools and their surroundings, and from time to time recommend such measures as they may deem necessary for the prevention of disease and for the promotion of the health of the pupils and teachers.

21. All committees shall discharge their duties without special direction of the Board, where the power is expressly given ; but in other cases no action of a committee shall be binding until reported to and approved by the Board. No member of the Board shall be interested in or derive pecuniary benefit, directly or indirectly, from any contract, agreement or purchase made by or for any committee of the Board. Every report shall be signed by a majority of the committee, and shall contain a statement of facts, with their opinion in writing. No report shall be made by a committee unless the subject thereof shall have been considered at a meeting of which the members have been notified. When such report is made, a minority of the committee may also present their views in writing.

#### RULES OF ORDER.

22. The regular order of business at the meetings of the Board shall be as follows :

1. Calling the roll.
2. Reading the minutes.

3. Reception of Petitions and Memorials.
4. Presentation of Bills and Claims.
5. Reports of Standing Committees.
6. Reports of Special Committees.
7. Notices and Resolutions.
8. Unfinished Business.
9. Miscellaneous Business.

The order of business or any rule of the Board may be suspended temporarily at any meeting by a vote of two-thirds of the members present.

23. All motions and resolutions, for the consideration of the Board, shall be seconded, and if required by the President, or any member of the Board, reduced to writing; and when any such motion or resolution shall have been stated by the Chair or read by the Secretary, it shall be deemed to be in the possession of the Board.

24. It shall be in order for a member at any time, when the attention of the Board is not occupied with other business, to make inquiries in regard to any subjects connected with the affairs of the Board, and to receive answers thereto; but he shall not be permitted to make the subject of inquiry a matter of debate, except on a motion made and seconded at an appropriate time in the order of business. Such inquiry shall in all cases be addressed to the Chair, and the reply made by him or by the member specially directed by him to reply. No member shall interrupt another in possession of the floor without his consent, nor then, except to correct a misapprehension or misrepresentation.

25. No member shall speak more than twice on the same question at any meeting except by general consent;

nor shall a member occupy the floor more than ten minutes at one time without like consent.

26. If any member, in speaking, shall transgress the rules of the Board, the President or any member may call him to order, in which case the member shall resume his seat, and on the point of order being stated, the Chair shall decide the same without debate; but such decision may be appealed from, in which case the Board shall decide.

27. When a question is under debate, no motion shall be received, except—

To adjourn,  
 To lay on the table,  
 The previous question,  
 To commit,  
 To postpone indefinitely,  
 To postpone to a certain time,  
 To amend,

which motion shall have precedence in the order named. A motion to adjourn, to lay on the table, or for the previous question, shall be decided without debate.

28 The previous question may be demanded by one-third of the members present, and shall be in this form: "Shall the main question be now put?" And its effect shall be to end debate and bring the Board to a direct vote, first upon amendments, if any, and then upon the main question.

29. The yeas and nays shall be ordered on any question on demand of one member. Every member present shall vote when his name is called, if required by the President

or any other member, and the names of members refusing to vote upon any resolution shall be recorded as voting in the negative.

30. No reconsideration shall be had except upon the motion of a member who voted with the majority, nor later than the second regular meeting after the original vote was taken, nor by less than thirteen votes.

31. The Board may form itself into a Committee of the Whole, which shall be governed by the rules of the Board, so far as possible, and a motion for the committee to rise may be made by any member at any time.

32. In other respects, the proceedings of the Board shall be conducted according to the usual rules of parliamentary law, for which rules "Cushing's Law and Practice of Legislative Assemblies" shall be accepted as authority.



# REGULATIONS.



# REGULATIONS

FOR THE

## GOVERNMENT OF THE SCHOOLS.

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### I.—SYSTEM AND GRADE.

#### I. ESTABLISHED.

The schools under the government of the Board shall be graded and classified as follows :

Primary,  
Grammar,  
High,  
Normal,

which shall be open for the instruction of pupils of both sexes, to be classed separately or in mixed classes, as the Board may from time to time determine.

#### PRIMARY SCHOOLS.

The Primary Course shall comprise instruction in orthography, reading, language lessons, writing, arithmetic, geography, drawing and vocal music. No pupil shall be admitted under five years of age.

Certificates of graduation shall be presented at the close of each term to such pupils as shall merit the same.

#### GRAMMAR SCHOOLS.

The Grammar Course shall comprise, in addition to the instruction prescribed for the Primary Course, grammar, history, composition and declamation.

No pupil shall be admitted to a grammar school without a certificate of graduation from a primary school or, if the applicant has not been in attendance at a primary school, upon personal examination by the principal of such grammar school; but should any primary school be insufficient to accommodate the children entitled to and applying for admission, while there is room for more pupils in the grammar department, the Commissioners of the ward may admit pupils of a lower grade into the grammar department; and should the reverse be the case, the vacancies may be filled by keeping the pupils longer in the primary school, the studies pursued determining the grade of the class.

Certificates of graduation shall be presented at the close of the school year to such pupils as shall merit the same.

#### HIGH SCHOOL.

The High School shall comprise a male and female department, and shall be under the general government of a male principal, with male assistants for the male department, and a female vice-principal, with female assistants, for the female department.

The High School course shall comprise, in addition to the instruction prescribed for the grammar course, the elements of chemistry, physiology, astronomy, algebra, book-keeping, geometry, geology, drawing and such other branches, including Latin, Greek, German and French languages, and the higher mathematics, as the Board shall prescribe. Attention shall also be paid to gymnastic exercises for the development and health of the pupils. The introduction and continuance of any study prescribed shall be discretionary with the Committee on Normal

and Training and High Schools, in conjunction with the President and the City Superintendent.

No pupil shall be admitted under the age of eleven years, nor without a certificate of graduation from a grammar school, or, if the applicant has not been in attendance at a grammar school, upon an examination equivalent to that to which the pupils of the grammar schools are subjected for graduation. The Colored School in its relation to the High School, as to candidates for admission thereto, shall rank as a grammar school.

Special examinations may be held, and pupils qualified for admission at that stage of the course received, at the commencement of any term. Those from the grammar schools shall have the preference.

The Committee on Normal and Training and High Schools, with the City Superintendent, may, at their discretion, readmit pupils who may have lost their membership by absence.

Certificates of graduation shall be presented at the close of the school year to such pupils as shall merit the same.

#### NORMAL AND TRAINING SCHOOL.

A Normal and Training School, for the training and education of teachers, shall be maintained in the Training School building, under a principal and such assistance as may be necessary. It shall consist of two grades, requiring two years to complete the course of study, and shall be conducted in all respects as a model school. Pupils shall spend at least eight weeks of the Normal School year in the Training School and, under the direction of a regular teacher, conduct class exercises, and while thus

engaged shall be subject to the same direction of the principal of the Training School as his assistants.

No pupil shall be admitted without a certificate of graduation from the High School, or, if the applicant has not been in attendance at the High School, upon an examination equivalent to that which the pupils of the High School are subjected for graduation. Non-residents, upon payment of such tuition fee as shall be established by the Board, may be admitted, under the direction of the Committee on Normal and Training and High Schools. All pupils upon entering the school will be required to sign a written declaration of intention to teach in the schools of this city, if desired.

The President of the Board shall, after the examination and on the recommendation of the Committee on Normal and Training and High Schools and the City Superintendent, grant diplomas of graduation, which shall also be certificates of qualification to teach.

The Board shall designate one of the public schools to be used for a training or practice school for the pupils of the Normal School.

## 2. DISCRETIONARY.

In addition to the regular graded schools, the Board may, at its discretion, establish and maintain—

Intermediate Schools,  
Evening Schools,  
Industrial Schools,  
Colored Schools.

## INTERMEDIATE SCHOOLS.

The intermediate schools shall consists of the primary grades, together with the sixth and fifth grades grammar



department, and a certificate shall be given to any graduate from such schools, which shall admit such graduates to the grammar school of the grammar school district in which he resides.

#### EVENING SCHOOLS.

Evening schools shall be provided during such portion of the year as the Board may direct, for the instruction of persons unable to attend school during the day, wherein may be taught the studies prescribed for the grammar schools, with the addition of bookkeeping and mechanical drawing, at the discretion of the City Superintendent. The terms and conditions of admission shall be prescribed by the Board, but no pupil shall be admitted under twelve years of age.

#### INDUSTRIAL SCHOOLS.

Industrial schools shall be for the instruction of poor and destitute children in primary studies, and such industrial pursuits as may be deemed expedient; but no expenditure shall be made by the Board for such schools, except for educational purposes; nor shall the Board pay more than two hundred dollars per annum on account of rent for any such school.

#### COLORED SCHOOLS.

The colored schools shall be for the especial accommodation of colored children, who shall be admitted on application to the principals, and the said schools shall be conducted in conformity with the regulations of the Board, so far as the same are applicable.

## II.—TERMS AND VACATIONS.

### I. TERMS.

The school year shall commence on the second Monday in September, and terminate on the Friday next preceding the fourth day of July, and be divided into three terms, ending respectively on the Friday next preceding Christmas, the Friday next preceding the first day of April, and the Friday next preceding the fourth day of July.

### 2. VACATIONS.

The vacations shall be from Christmas to New Year's Day inclusive, one week which shall include the first day of April, and all legal holidays. When any holiday shall occur on Thursday, the schools shall also be closed on the following Friday. At no other time shall the schools be closed, except by resolution of the Board, or by special consent of the President and the City Superintendent.

## III.—SESSIONS.

### I. PRIMARY, GRAMMAR AND NORMAL SCHOOLS.

The schools shall be open during the regular terms, five days in each week, from Monday to Friday inclusive; and there shall be two sessions daily—a morning session, from 9 a. m. to 12 m., with a recess of fifteen minutes near the middle of the session, and an afternoon session, from 1.30 p. m. to 3.30 p. m., with calisthenic exercises in the school room near the middle of the session. In the first grade of the primary departments an afternoon recess of ten minutes, to be supervised by the assistants of that grade, may be given, at the discretion of the City Superintendent and the principal of the school.

The Committee on Teachers may, at its discretion, authorize in such schools of the city, wherever it may seem advisable, the holding of a morning session from 9 to 11.45 a. m., with the usual recess, and an afternoon session from 1.15 to 3.30 p. m.

## 2. HIGH SCHOOL AND COLORED SCHOOL.

In the High School and Colored School, at the discretion of the City Superintendent, the noon intermission may be reduced to half an hour, and the school may be dismissed at 2.30 p. m.

## 3. INDUSTRIAL SCHOOLS.

In the Industrial Schools, at the discretion of the City Superintendent, the noon intermission may be reduced to one hour, and the school dismissed at 3 p. m.

## 4. SINGLE SESSIONS.

Upon extremely stormy days the pupils of the first and second grades, primary department, may be excused by the principal from returning to school in the afternoon. The principal shall promptly notify the City Superintendent of such action.

## 5. EVENING SCHOOLS.

The evening schools, during their continuance, shall be open five evenings in each week—from Monday to Friday, inclusive. The session shall commence at 7.30 p. m. and close at 9.15 p. M.

# IV.—OPENING AND CLOSING EXERCISES.

The morning sessions of the schools shall be opened, and the sessions of the evening schools shall be closed, with a reading of a portion of the Holy Scriptures, with-

out comment, and repeating of the Lord's Prayer. Vocal music, at the discretion of the principal, may be added to these exercises, but together they shall occupy no more than fifteen minutes.

## V.—PUPILS.

### I. ADMISSION.

(a) *Sanitary Condition*.—Successful vaccination or a former attack of small-pox shall be a condition of admission to any school, and the certificate of a physician shall be necessary as to either before enrollment; but where insusceptibility to the vaccine virus shall be claimed or reasonably demonstrated to the satisfaction of the Sanitary Committee, such children may be admitted to school under such provisions and restrictions as the said Committee may decide upon in each individual case.

Teachers and pupils residing in a house where infectious or contagious disease exists, shall be immediately suspended from school, and shall not be readmitted except upon a certificate from the Board of Health that all danger of contagion is passed.

(b) *Personal*.—No pupil shall be admitted into any school or received in any class unless personally clean; nor shall any child notoriously vicious, or having such previous record in school as warrants his exclusion, be admitted to any school.

### 2. ATTENDANCE AND PERMITS.

All children shall attend the schools of the district in which they reside, unless for special reasons a Commissioner of the ward in which such school is located shall

give a written "permit" to attend elsewhere, which "permit" shall also receive a written approval of a Commissioner of the ward in which the school such child desires to enter is located. All "permits" shall be kept on file in the office of the principal for the inspection of the City Superintendent and the Commissioners, until the close of the school year, and no "permits" shall extend beyond the school year.

Children in the eighth grade in any grammar school removing from a district may complete their course in the school in which they have been attending, without special permission, unless their places are required for the accommodation of children residing in such district.

### 3. RECEPTION AND CLASSIFICATION.

Every pupil, on entering school, shall be assigned to a class of the grade which examination shall show him or her prepared to enter.

No greater number of pupils shall be assigned to any class room than there are regular seats in such class room.

No grammar class shall have less than forty pupils, except the eighth grade, where the minimum shall be thirty.

### 4. EXCLUSION FOR TARDINESS.

No pupil shall enter the school later than fifteen minutes after the hour of commencement, excepting in the evening schools, where they shall be admitted until 7.30 p. m.

### 5. ABSENTEES.

(a) *Notification of Parents.*—When any pupil shall have been absent from school two consecutive days, the principal or class teacher shall personally inform the parents or guardian of the fact, unless the principal has

satisfactory information that the parent has knowledge of such absence. No pupil shall, under any circumstances whatever, be sent by any teacher to ascertain the cause of any other pupil's absence from school.

(b) *Suspension*.—Any pupil who shall have been absent ten days (or evenings in the evening schools), during the term, may be suspended from school during the remainder of the term, unless it shall be shown to the satisfaction of the principal that the pupil has been sick, or has been detained by sickness in his or her family.

## 6. INSTRUCTION.

(a) *School room*.—The course of study and the methods of teaching shall be as prescribed by the Board in the published Manual of Instruction, with such variations therefrom as the City Superintendent may, in his discretion, order in any school or class.

(b) *Preparation of lessons out of school*.—No pupil of a grade lower than the sixth shall be required to prepare any lesson out of school.

No pupil of the sixth or any higher grade shall be required to prepare more than one lesson out of school; nor shall any pupil take any book or slate from a school building except for such preparation.

## 7. DISCIPLINE.

(a) *Detention*.—Pupils deficient in lessons, disorderly, or tardy, may be detained, not to exceed one hour, after the dismissal of school in the afternoon, under the personal supervision of their respective teachers; but no pupil shall be deprived of recess or noon intermission.

(b) *Suspension*.—Principals shall have power to suspend for gross offenses, but every suspension shall be reported



without delay to the Commissioners of the ward in which the school is located, and also (except in case of permits) to the Commissioners of the ward of which the pupil is a resident, who shall investigate the facts and confirm or annul the suspension. Suspension from the High School or evening schools shall be reported without delay to the standing committees on such schools respectively, who shall investigate the facts and confirm or annul the suspension.

#### 8. RECORDS.

Records of attendance, scholarship and deportment shall be kept in all the schools in the class rooms, in a manner prescribed by the Board, which shall be uniform in all the schools of the same grade.

#### 9. CERTIFICATES.

Monthly certificates of merit shall be awarded to pupils in the primary and grammar schools whose attendance, punctuality, scholarship and deportment shall entitle them to the same.

#### 10. TESTIMONIALS.

Testimonials for distinguished merit shall be awarded annually, in all the schools, to pupils whose attendance, punctuality, scholarship and deportment shall entitle them to the same.

#### 11. BASIS AND ALLOWANCES.

The percentages and other requisites to obtain certificates or testimonials shall be fixed by the Board, and communicated to teachers by the City Superintendent in "Instructions," to be furnished by him to principals. For any extremely stormy or inclement day, the President of the Board and City Superintendent may order

marks for absence to be canceled in all the schools, which orders shall be published in two of the newspapers of the city, on the Saturday next succeeding the making of the same.

## 12. EXAMINATIONS.

(a) *Term*.—Examinations shall be held at least twice in each year, under the direction of the Committee on Text Books, Course of Study and Examinations, with the City Superintendent.

(b) *Annual*.—An examination for promotion and graduation shall be held in all the schools during the month of June in each year, under the direction of the Committee on Course of Study and Examinations, with the City Superintendent; and all the grades, from the fourth to the eighth, inclusive, shall be examined in the same manner, and under uniform regulations. The monthly card record shall be combined with the annual examination standing in determining the fitness of the pupil for promotion or graduation. In conducting and ascertaining the results of any examination, the City Superintendent may require the aid of such teachers as may be needed.

## 13. BOOKS AND STATIONERY.

(a) *Supply*.—Books, stationery and other articles needed in the school room shall be furnished without cost to pupils, but articles destroyed or damaged must be replaced.

(b) *Damages*.—Any injury by a pupil to books or school articles, or to the furniture or building, shall be paid for by the parent or guardian, in accordance with a bill to be rendered by the principal. In case payment be refused, the pupil shall be suspended, as provided in subdivision "C," under the head of "Discipline."

## VI.—TEACHERS.

## I. RANK AND DESIGNATION.

The teachers shall rank, and in all records and schedules of the Board, be designated as—

Principals,  
Vice-Principals,  
Head Assistants,  
First Assistants,  
Assistants.

## 2. RELATIONS AND DUTIES.

## PRINCIPALS.

(a) *Reports.*—Principals shall be immediately responsible to the City Superintendent, to whom they shall make the reports prescribed in these regulations, or which may be required by him from time to time for his information, and shall meet with him for conference as often as he may deem necessary.

They shall see that the school registers are kept carefully and accurately, make requisitions for all school supplies, which requisitions shall be approved by the City Superintendent, and keep in their offices for inspection such records and file, and make such reports and returns to the Secretary of the Board as are prescribed in these regulations or may be required by the Board.

(b) *Authority.*—Principals shall have charge and control of their schools, school buildings and property; the reception and classification of pupils and their instruction and discipline; and shall, when not in charge of regular classes, teach an average of two hours each day.

They shall have the direction and control of vice-principals and assistants in the management of their de-

partments and classes, and may require them to remain after school hours, not to exceed once in each week, for instruction and conference.

They shall personally direct the janitors in the performance of their duties, as the same may be prescribed, and report any neglect thereof to the committee.

(c) *Care of property.*—They shall have personal care of all school property, books and apparatus, protect the same so far as possible from mutilation and injury, render the bills and enforce the collections and penalties prescribed by the Board for the same, render account and make return annually of the sums collected pursuant thereto.

They shall remain in the city during the last week of the summer vacation and personally supervise the cleaning and preparation of the school houses and class rooms, and see that the same, and the furniture and apparatus, are in all respects arranged and in order before the opening of the new session.

(d) *Reception of Visitors.*—They shall receive all visitors and afford them proper accommodation and facilities for seeing school work, but with such limitations as shall prevent annoyance or interruption to teachers of classes.

They shall not permit any person to visit the school for the purpose of commending or exhibiting any book or other article, nor shall they distribute circulars, tickets or advertisements, or give notice to the pupils under their charge of any exhibition or business, or permit the same to be done on the school premises.

#### VICE-PRINCIPALS.

Vice-principals shall have general charge of the floor or department with which they are connected, and shall

transmit in detail to the assistants of their grade all directions of the principals.

In the absence of the principal, the vice-principal of the highest grade, or should there be no vice-principal, the senior assistant of the highest grade, shall assume his station and duties.

Every vice-principal shall also have charge of a regular class of the highest grade of her department, and conduct and make the reports concerning the same prescribed in the regulations for assistants.

#### ASSISTANTS.

Assistants shall, under the direction of the principal, personally instruct the pupils assigned to them in accordance with the Manual of Instruction; keep records of attendance, scholarship and deportment; have charge of the school room property, and protect them from injury or mutilation as far as possible, and report any injuries to the same; enforce order and discipline in the classes, so far as possible, without appeal to the principal, and render to him such assistance in the halls, courts and yards pertaining to the school buildings, at the opening, recess, intermission and dismissal, as he may deem necessary.

#### 3. APPEAL.

In case of dispute or question as to the propriety of duties which vice-principals or assistants may be called upon by principals to perform, appeal may be made to the City Superintendent, which appeal shall be in writing.

#### 4. ATTENDANCE.

(a) *Hours*.—All teachers shall be in attendance at their stations or class rooms, and prepared for duty, fifteen minutes before the opening of the school session, and the

school hours shall be devoted to the interests of the Board, to the exclusion of any other employment, study or pursuit.

(b) *Register*.—Principals shall keep an accurate register of the attendance, absence and tardiness of all the teachers of their schools, and the time lost thereby in each instance, and report the same annually to the City Superintendent; the absence under the heads “with permission” and “without permission;” the tardiness under the heads “excused” and “not excused.” Teachers shall mark their time according to the school clock, as regulated by the principal.

(c) *Tardiness*.—As often as the “unexcused” tardy marks of any teacher shall amount to five, principals shall make special report of the same to the City Superintendent.

(d) *Visiting for Instruction*.—Teachers may visit schools other than their own, during school hours, whenever the City Superintendent shall permit or direct such visitation for the instruction of the teacher, and shall make report of the same to the principal.

## 5. SALARIES.

(a) *Schedules*.—The salaries of all teachers shall be in accordance with the schedules that may be prescribed by the Board, which schedules shall provide for an annual increase through a term of years to a maximum. No schedule shall be changed except at the commencement of the school year.

(b) *Increase*.—The annual increase in teachers’ salaries shall be determined by the date of original appointment. Promotions of assistant teachers shall be regarded as new



appointments, provided that no promotion shall work a decrease or prevent the increase of salary by reason of term of service.

(c) *Payments and Deductions.*—Salaries shall be paid monthly, beginning with the month of September and ending with June, making ten payments each year. The salary of any teacher entering or leaving the employ of the Board between any two payments shall be in proportion to the salary for that period which the number of days of actual service bears to the whole number of school days in such period, and all deductions from salaries on account of absence shall be upon the same basis.

(d) *Absence.*—Teachers absent on account of sickness (whenever such absence does not exceed fifteen days in any one month) shall forfeit the pay of their substitutes. For absence more than fifteen days but not exceeding thirty consecutive school days, the Committee on Teachers may grant salary, less substitutes pay, at its discretion. If the time of such absence exceeds fifteen days in any one month, the salaries of such teachers shall be deducted for the time, and the Secretary shall pay the substitute as required.

(e) *Forfeiture.*—Teachers absent from school duty, except on account of sickness, shall forfeit their salary during absence; five tardy marks, "unexcused," shall count as one-half day's absence, and a corresponding deduction be made at the next payment.

(f) *Relief.*—Appeal for relief from any such forfeiture or loss may be made to the Committee on Teachers, who may, at its discretion, relieve therefrom, provided, that no teacher shall receive any such relief for absence for more than thirty consecutive school days.

(g) *Engagements*.—All engagements of teachers shall be made with reference to the “school year.” No teacher shall be connected with any organization or engage in any business which, in the opinion of the Board, may interfere with the proper discharge of the duties prescribed by these regulations.

(h) *Resignations*.—Teachers shall give one month’s notice of intention to resign. In default of the same, they shall forfeit one month’s salary.

## 6. SUBSTITUTES.

(a) *Appointment*.—Teachers detained from school shall immediately notify the principal, who shall, when such absence exceeds one day, notify the City Superintendent, who may appoint substitutes to discharge their duties during such absence.

(b) *Pay*.—The pay of substitutes shall be, in the High School, male, \$4.00, and female, \$2.50 per day; in the grammar classes, male, \$3.00 per day; in the grammar and primary classes, females, \$1.50 per day; in the evening schools, \$1.00 per session for both males and females; and in the Evening High School, \$2.00 per session.

## VII.—TEACHERS’ INSTITUTE.

A Teachers’ Institute shall be held on the third Saturday of November, February and April, at which the principals and teachers of all the schools shall attend.

Sessions shall commence at 9 a. m. and close at 12 m.

The Institute shall be under the personal direction of the City Superintendent, who shall keep a record of the attendance and report the same to the Board.

## VIII.—BUILDINGS.

## 1. USE.

The school houses shall be used for no other purposes than such as are immediately connected with the system of public instruction, and during the school hours mentioned in these regulations, unless by special permission of the Board.

## 2. INSURANCE.

The buildings, furniture, libraries and school apparatus shall be kept insured for such amounts as the President may deem reasonable or the Board may direct.

## 3. CARE.

All school buildings shall be opened and closed by and in the care of janitors. They shall perform such duties as the Committee on Heating shall direct, and their compensation therefor shall be as the Board may prescribe.

## IX.—SCHOOL DISTRICTS.

The schools may be designated by the names of the streets on which they are located. Their school districts shall be as follows:

## GRAMMAR SCHOOL DISTRICTS.

## BURNET STREET.

The Burnet Street grammar school district shall be that district embraced within the following boundaries: Commencing at the river, along Rector street to Broad street; thence to West Park street; thence to Halsey street; thence to Warren street; thence to High street; thence to Sussex avenue; thence to Boyden street; thence to Eighth avenue; thence to Broad street; thence to Clay street; thence to the river.

## WASHINGTON STREET.

The Washington street grammar school district shall be that district embraced within the following boundaries: Commencing at Broad street, along Market street to High street; thence to Spruce street; thence to Clinton avenue; thence to Broad street; thence to Market street.

## MORTON STREET.

The Morton street grammar school district shall be that district embraced by the following boundaries: Commencing at High street, along Waverly place to Somerset street; thence to Montgomery street; thence to Charlton street; thence to Springfield avenue; thence to High street; thence to Waverly place.

## LAWRENCE STREET.

The Lawrence street grammar school district shall be that district embraced within the following boundaries: Commencing at the river, along Rector street to Broad street; thence to West Park street; thence both sides West Park street to Halsey street; thence both sides Halsey street to Warren street; thence to High street; thence to Market street; thence to Broad street; thence to Fair street; thence to Oak street; thence to Oak alley; thence to East Fair street; thence to N. J. R. R. avenue; thence to the river.

## CHESTNUT STREET.

The Chestnut street grammar school district shall be that district embraced by the following boundaries: Commencing at N. J. R. R. avenue, along Wright street to Broad street; thence to Murray street; thence to Clinton avenue; thence to High street; thence to Spruce

street; thence to Clinton avenue; thence to Broad street; thence to Fair street; thence to Oak street; thence to Oak alley; thence to East Fair street; thence to N. J. R. R. avenue; thence to Wright street.

#### LAFAYETTE STREET.

The Lafayette street grammar school district shall be that district embraced by the following boundaries: Commencing at the river, along N. J. R. R. avenue to Walnut street; thence to Pacific street; thence to Elm street; thence to Van Buren street; thence to Lafayette street; then to Jackson street; thence both sides of said street to the river.

#### SOUTH EIGHTH STREET.

The South Eighth street grammar school district shall be that district embraced by the following boundaries: From city line, along South Orange avenue to Littleton avenue; thence to Bank street; thence to Morris avenue; thence to New street; thence to Second street; thence to Warren street; thence to Third street; thence to Morris and Essex Railroad avenue; thence to the city line, and thence along city line to South Orange avenue.

#### THIRTEENTH AVENUE.

The Thirteenth avenue grammar school district shall be that district embraced by the following boundaries: Commencing at High street, along Bank street to Littleton avenue; thence to South Orange avenue; thence to Springfield avenue; thence to High street, and thence to Bank street.

## CENTRAL AVENUE.

The Central avenue grammar school district shall be that district embraced by the following boundaries: Commencing at High street, along Bank street to Morris avenue; thence to New street; thence to Second street; thence to Warren street; thence to Third street; thence to M. & E. R. R. avenue; thence to Clifton avenue; thence to Eighth avenue; thence to Boyden street; thence to Sussex avenue; thence to High street, and thence to Bank street.

## SUMMER AVENUE.

The Summer avenue grammar school district shall be that district embraced by the following boundaries: Commencing at the river, along Fourth avenue to Bloomfield avenue; thence to the Morris canal; thence along the canal to First avenue; thence to city line; thence along city line to the Second river.

## MILLER STREET.

The Miller street grammar school district shall be that district embraced by the following boundaries: Commencing at the city line, along N. J. R. R. avenue to Wright street; thence to Broad street; thence to Murray street; thence to Clinton avenue; thence to High street; thence to Waverly place; thence to Somerset street; thence to Avon avenue; thence to Chadwick avenue; thence to city line; thence along city line to N. J. R. R. avenue.

## OLIVER STREET.

The Oliver street grammar school district shall be that district embraced by the following boundaries: Commencing at the city line, along N. J. R. R. avenue to



Walnut street; thence to Pacific street; thence to Elm street; thence to Sandford street; thence to South street; thence to Avenue G, and thence to city line.

#### NORTH SEVENTH STREET.

The North Seventh street grammar school district shall be that district embraced within the following boundaries: Beginning at the city line, along First avenue to the Morris canal; thence along the canal to Bloomfield avenue; thence to First street; thence along said street and in an imaginary line through Aqueduct Park to the junction of First street and the Morris canal; thence along the canal to M. & E. R. R. avenue; thence to the city line, and thence along the city line to First avenue.

#### SOUTH MARKET STREET.

The South Market street grammar school district shall be that district embraced by the following boundaries: Commencing at the river, along Jackson street, not including said street, to N. & N. Y. R. R.; thence to Ferguson street; thence to Ferry street; thence to Niagara street; thence to Margaretta street; thence to Avenue L; thence to Hamburg place; thence to the bay; thence along the bay and river to Jackson street.

#### HAMBURG PLACE.

The Hamburg place grammar school district shall be that district embraced by the following boundaries: Commencing at Jackson street, along the N. & N. Y. R. R. to Ferguson street; thence to Ferry street; thence to Niagara street; thence to Margaretta street; thence to Avenue L; thence to Hamburg place; thence to the bay; thence along the bay to the southern city line; thence

along the city line to Avenue G ; thence to South street; thence to Sandford street; thence to Elm street; thence to Van Buren street; thence to Lafayette street; thence to Jackson street, and thence, not including said street, to N. & N. Y. R. R.

#### SOUTH TENTH STREET.

##### *For Fifth and Sixth Grade Classes.*

The South Tenth street primary school district shall be that district embraced by the following boundaries: Commencing at Littleton avenue, along Springfield avenue to the city line; thence to South Orange avenue; thence to Littleton avenue; thence to Springfield avenue.

#### NEWTON STREET.

The Newton street grammar school district shall be that district embraced within the following boundaries:

##### *For Seventh and Eighth Grade Classes.*

Commencing at the junction of South Orange avenue and Springfield avenue, along Springfield avenue to the city line; thence along city line to South Orange avenue, and thence to Springfield avenue.

##### *For Fifth and Sixth Grade Classes.*

Commencing at High street, along Springfield avenue to Littleton avenue; thence to Bank street; thence to High street; thence to Springfield avenue.

#### EIGHTEENTH AVENUE.

The Eighteenth avenue grammar school district shall be that district embraced by the following boundaries: Commencing at the city line, along Chadwick avenue to

Avon avenue; thence to Somerset street; thence to Montgomery street; thence to Charlton street; thence to Springfield avenue; thence to the city line.

“FRANKLIN.”

The “Franklin” grammar school district shall be that district embraced within the following boundaries: Commencing at the river, along Fourth avenue to Bloomfield avenue; thence to First street; thence along said street and in an imaginary line through Aqueduct Park to the junction of First street and Morris canal; thence along the canal to M. & E. R. R. avenue; thence to Clifton avenue; thence to Eighth avenue; thence to Broad street; thence to Clay street, and thence to the river.

PRIMARY SCHOOL DISTRICTS.

NORMAL AND TRAINING.

*Training Department.*

The primary school district of the Training Department of the Normal and Training School shall be comprised within the following boundaries: From Washington street, along Market street to Springfield avenue; thence to High street; thence to William street; thence to Springfield avenue; thence to Howard street; thence to Bank street; thence to High street; thence to New street; thence to Plane street; thence to Morris canal; thence to Washington street; thence to Market street.

BURNET STREET.

The Burnet-street primary school district shall be that district embraced within the following boundaries: Commencing at the river, along Bridge street to Broad street; thence to M. & E. R. R. avenue; thence to Boyden

street ; thence to Sussex avenue ; thence to High street ; thence to New street ; thence to Broad street ; thence to Rector street ; thence to the river.

#### STATE STREET.

The State street primary school district shall be that district embraced within the following boundaries: Commencing at the river, both sides of Bridge street, to Broad street; thence both sides to Morris and Essex Railroad avenue; thence both sides to Clifton avenue; thence both sides to Seventh avenue; thence both sides to Belleville avenue; thence both sides to Clay street; thence both sides to the river.

#### WEBSTER STREET.

The Webster street primary school district shall be that district embraced within the following boundaries: Commencing at the river, along Clay street to Broad street, not including said streets; thence to Belleville avenue, not including said avenue; thence to Seventh avenue, not including said avenue; thence to Clifton avenue; thence, including both sides of said avenue, to Sixth avenue; thence, including both sides of said avenue, to Stone street; thence to Crane street; thence, including both sides of said street, to Summer avenue; thence, including both sides of said avenue, to Taylor street; thence to Belleville avenue; thence to Third avenue, and thence to the river.

#### WASHINGTON STREET.

The Washington street primary school district shall be that district embraced within the following boundaries: Commencing at Broad street, along Market street to

Springfield avenue; thence to High street; thence to Spruce street; thence to Clinton avenue; thence to Broad street; thence to Market street.

#### MORTON STREET.

The Morton street primary school district shall be that district embraced within the following boundaries: Commencing at High street, along Baldwin street to Broome street; thence to West Kinney street; thence to Charlton street; thence to Springfield avenue; thence to William street; thence to High street, and thence to Baldwin street.

#### MONMOUTH STREET.

The Monmouth street primary school district shall be that district embraced within the following boundaries: Beginning at High street, along Waverly place to Barclay street; thence, including both sides of said street, to Spruce street; thence to Prince street; thence, including both sides of said street, to West Kinney street; thence to Broome street; thence to Baldwin street; thence to High street, and thence to Waverly place.

#### LAWRENCE STREET.

The Lawrence street primary school district shall be that district embraced within the following boundaries: Commencing at Rector street, from the river to Broad street; thence to New street; thence to Plane street; thence to the Morris canal; thence to Washington street; thence to Market street; thence to Broad street; thence to Fair street; thence to Oak street; thence to Oak alley; thence to East Fair street; thence to N. J. R. R. avenue, and thence to the river.

## CHESTNUT STREET.

The Chestnut street primary school district shall be that district embraced within the following boundaries: Commencing at N. J. R. R. avenue, along Wright street to Broad street; thence to Murray street; thence to Clinton avenue; thence to High street; thence to Spruce street; thence to Clinton avenue; thence to Broad street; thence to Fair street; thence to Oak street; thence to Oak alley; thence to East Fair street; thence to N. J. R. R. avenue, and thence to Wright street.

## LAFAYETTE STREET.

The Lafayette street primary school district shall be that district embraced within the following boundaries: From the river, along N. J. R. R. avenue to Elm street; thence to Van Buren street; thence to Lafayette street; thence to Jackson street, and thence both sides of Jackson street to the river.

## SOUTH EIGHTH STREET.

The South Eighth street primary school district shall be that district embraced within the following boundaries: From the city line, along Ninth avenue to Warren street; thence to Dickerson street; thence to Third street; thence to Warren street; thence to Fairmount avenue; thence to Bank street; thence to Littleton avenue; thence to South Orange avenue; thence to South Ninth street; thence to Thirteenth avenue; thence to South Twelfth street; thence to South Orange avenue; thence, not including said avenue, to South Eighteenth street; thence, not including said street, to Eleventh avenue, and thence to the city line.



## THIRTEENTH AVENUE.

The Thirteenth avenue primary school district shall be that district embraced within the following boundaries: From South Orange avenue, along Howard street to Bank street; thence to Hunterdon street; thence to South Orange avenue, and thence to Howard street.

## CENTRAL AVENUE.

The Central avenue primary school district shall be that district embraced within the following boundaries: From High street, along New street to Second street; thence to Warren street; thence to Third street; thence to M. & E. R. R. avenue; thence to Boyden street; thence to Sussex avenue; thence to High street, and thence to New street.

## WARREN STREET.

The Warren street primary school district shall be that district embraced within the following boundaries: From High street, along Bank street to Fairmount avenue; thence to Warren street; thence to Second street; thence to New street; thence to High street, and thence to Bank street.

## SUMMER AVENUE.

The Summer avenue primary school district shall be that district embraced within the following boundaries: Commencing at the river, along Third avenue to Belleville avenue; thence to Taylor street; thence to Garside street; thence to Third avenue; thence to Bloomfield avenue; thence to the Morris canal; thence along the canal to Abington avenue, and thence to the river.

## ELLIOT STREET.

The Elliot street primary school district shall be that district embraced within the following boundaries: From the river, along Abington avenue to the Morris canal; thence to the Old Bloomfield road; thence to city line, and thence along city line to the river.

## MILLER STREET.

The Miller street primary school district shall be that district embraced within the following boundaries: Beginning at N. J. R. R. avenue, along Poinier street, not including the said street, to Elizabeth avenue; thence in a direct westerly line to Milford avenue; thence, including both sides of said avenue, to Clinton avenue; thence, including both sides of said avenue, to Stratford place; thence, including both sides of said place, to Avon avenue; thence to Somerset street; thence to Waverly place; thence to High street; thence to Clinton avenue; thence to Murray street; thence to Broad street; thence to Wright street; thence to N. J. R. R. avenue, and thence to Poinier street.

## ELIZABETH AVENUE.

The Elizabeth avenue primary school district shall be that district embraced within the following boundaries: Commencing at N. J. R. R. avenue, along Poinier street; thence, including both sides of said street, to Elizabeth avenue; thence in a direct westerly line to Milford avenue; thence, not including said avenue, to Clinton avenue; thence, not including said avenue, to Stratford place; thence, not including said place, to Avon avenue; thence to Chadwick avenue; thence to western city line; thence to southern city line; thence to N. J. R. R. avenue, and thence to Poinier street.

## CHARLTON STREET.

The Charlton street primary school district shall be that district embraced within the following boundaries: Commencing at Avon avenue, along Belmont avenue to West Kinney street; thence to Prince street; thence, not including said street, to Spruce street; thence to Barclay street; thence, not including said street, to Waverly place; thence to Somerset street; thence to Avon avenue, and thence to Belmont avenue.

## OLIVER STREET.

The Oliver street primary school district shall be that district comprised within the following boundaries: From N. J. R. R. avenue, along Walnut street to McWhorter street; thence to Garden street; thence to Pacific street; thence to Nichols street; thence to Jefferson street; thence to Malvern street; thence to Pacific street; thence to Johnson street; thence to N. J. R. R. avenue, and thence to Walnut street.

## SOUTH STREET.

The South street primary school district shall be that district comprised within the following boundaries: From city line, along N. J. R. R. avenue to Johnson street; thence to Pacific street; thence to Malvern street; thence to Sandford street; thence to Avenue G, and thence to the city line.

## WALNUT STREET.

The Walnut street primary school district shall be that district embraced within the following boundaries: From N. J. R. R. avenue, along Elm street to Sandford street; thence to Malvern street; thence to Jefferson street;

thence to Nichols street; thence to Pacific street; thence to Garden street; thence to McWhorter street; thence to Walnut street; thence to N. J. R. R. avenue, and thence to Elm street.

#### ANN STREET.

The Ann street primary school district shall be that district embraced within the following boundaries: Commencing at city line, along Avenue G to Sandford street; thence to Elm street; thence to Lang street; thence to Hamburg place; thence to Komorn street; thence, including both sides of said street, to Niagara street; thence to Margaretta street; thence to avenue L; thence to Hamburg place, and thence to Newark Bay.

#### NORTH SEVENTH STREET.

The North Seventh street primary school district shall be that district embraced within the following boundaries: Commencing at the city line, along the Old Bloomfield road to the Morris canal; thence along the canal to Bloomfield avenue; thence to First street; thence along First street and in an imaginary line through Aqueduct Park to the junction of First street and the Morris canal; thence along the canal to M. & E. & Bloomfield R. R., and thence to the city line.

#### ROSEVILLE AVENUE.

The Roseville avenue primary school district shall be that district embraced within the following boundaries: From city line, along M. & E. & Bloomfield R. R. avenue to Third street; thence to Dickerson street; thence to Warren street; thence to Ninth avenue, and thence to city line.

## SOUTH MARKET STREET.

The South Market street primary school district shall be that district embraced within the following boundaries: From the river, along Jackson street, not including said street, to N. & N. Y. R. R.; thence to Ferguson street; thence to Ferry street; thence to Niagara street; thence to Margaretta street; thence to Avenue L.; thence to Hamburg place; thence to Newark bay; thence along the bay to N. & N. Y. R. R.; thence to Komorn street; thence to Main street; thence to Ferry street; thence to Fillmore street; thence to Market street; thence to Read street, and thence to the river.

## HAMBURG PLACE.

The Hamburg place primary school district shall be that district embraced within the following boundaries: From Jackson street, along N. & N. Y. R. R. to Ferguson street; thence to Ferry street; thence to Niagara street; thence to Komorn street; thence, not including said street, to Hamburg place; thence to Lang street; thence to Elm street; thence to Van Buren street; thence to Lafayette street; thence to Jackson street, and thence, not including said street, to N. & N. Y. R. R.

## HAWKINS STREET.

The Hawkins street primary school district shall be that district comprised within the following boundaries: From the river, along Read street to Market street thence to Fillmore street; thence to Ferry street; thence to Main street; thence to Komorn street; thence to N. & N. Y. R. R., and thence to the bay.

## SOUTH TENTH STREET.

The South Tenth street primary school district shall be that district embraced within the following boundaries: Commencing at South Twelfth street, along Springfield avenue to Littleton avenue; thence to South Orange avenue; thence to South Ninth street; thence to Thirteenth avenue; thence to South Twelfth street, and thence to Springfield avenue.

## CAMDEN STREET.

The Camden street primary school district shall be that district embraced within the following boundaries: Commencing at Springfield avenue, along Littleton avenue to Bank street; thence to Hunterdon street; thence to South Orange avenue; thence to Morris avenue; thence to Springfield avenue, and thence to Littleton avenue.

## WAVERLY AVENUE.

The Waverly avenue primary school district shall be that district embraced within the following boundaries: Commencing at Avon avenue, along Hunterdon street to Fairview avenue; thence to Seventeenth avenue; thence to Lewis street; thence to West Kinney street; thence to Sayre street; thence to Springfield avenue; thence to South Twelfth street; thence to city line; thence along city line to Chadwick avenue; thence to Avon avenue, and thence to Hunterdon street.

## FIFTEENTH AVENUE.

The Fifteenth avenue primary school district shall be that district embraced within the following boundaries: Commencing at the city line, along Eleventh avenue to South Eighteenth street; thence, including both sides



of said street, to South Orange avenue; thence, including both sides of said avenue, to South Twelfth street, and thence to the city line.

#### NEWTON STREET.

The Newton street primary school district shall be that district embraced within the following boundaries: Commencing at Springfield avenue, along Howard street to South Orange avenue; thence to Morris avenue; thence to Springfield avenue, and thence to Howard street.

#### EIGHTEENTH AVENUE.

The Eighteenth avenue primary school district shall be that district embraced within the following boundaries: Commencing at Avon avenue, along Hunterdon street to Fairview avenue; thence to Seventeenth avenue; thence to Lewis street; thence to West Kinney street; thence to Sayre street; thence to Springfield avenue; thence to Charlton street; thence to West Kinney street; thence to Belmont avenue; thence to Avon avenue, and thence to Hunterdon street.

#### "FRANKLIN."

The "Franklin" primary school district shall be that district embraced within the following boundaries: Commencing at Bloomfield avenue, along First street and in an imaginary line through Aqueduct Park to the junction of First street and the Morris canal; thence along the canal to M. & E. R. R. avenue; thence to Clifton avenue; thence, not including said avenue, to Sixth avenue; thence, not including said avenue, to Stone street; thence to Crane street; thence, not including said street, to Summer avenue; thence, not including said avenue, to

Taylor street ; thence to Garside street ; thence to Third avenue ; thence to Bloomfield avenue, and thence to First street.

## X.—MISCELLANEOUS.

### I. CONSTRUCTION.

In the construction of these regulations, the word "teacher," in whatsoever relation the same may occur, shall be held and deemed to apply alike to principals, vice-principals, head assistants and assistants.

### 2. PUBLICATION.

Schedules of Salaries, the Manual of Instruction, the Registers, the Records and "Instructions" for keeping the same, mentioned in these regulations, and all orders or directions of a uniform and general character for the guidance of employees or agents of the Board, shall be prescribed, adopted and tabulated by the Board, filed in their office for inspection, and, except the registers and records, published with and as part of the Annual Report.

### 3. AMENDMENT.

These regulations may be amended at a regular meeting on one month's notice in writing, given at a regular meeting, by a vote of ten members. All supplements and amendments shall be adjusted to, and from time to time incorporated and published with these regulations, under appropriate titles and subdivisions.

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## INDEX TO REGULATIONS.

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